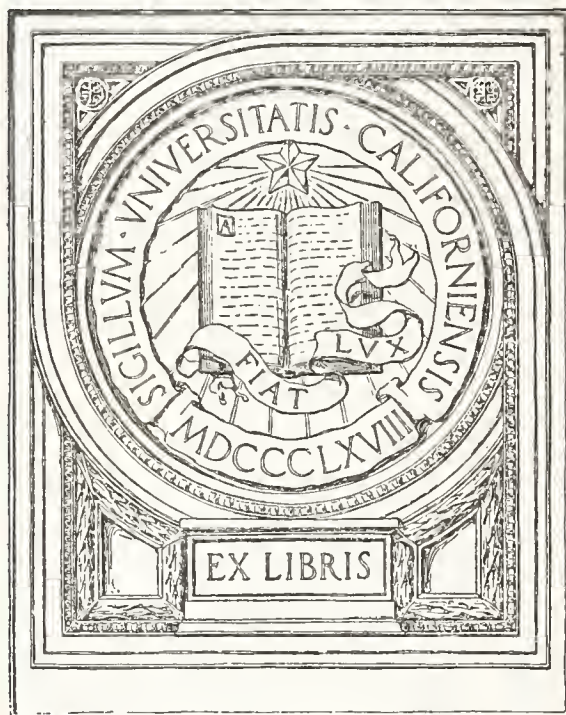



MEDICAL SCHOOL
LIBRARY



EX LIBRIS



Digitized by the Internet Archive
in 2017 with funding from
The National Endowment for the Humanities and the Arcadia Fund

“

THE JOURNAL

OF THE Arkansas Medical Society

PUBLISHED MONTHLY UNDER THE DIRECTION OF THE COUNCIL

Vol. XXIII.

LITTLE ROCK, ARK., JUNE, 1926

No. 1

Original Articles.

HYPERTROPHIED THYMUS*

NOBLE D. McCORMACK, *M. D.*
Fort Smith

In the past ten years, there has been considerable interest manifested in the thymus gland, both in clinical investigation and experimental research; but, as yet, there is no unanimity of opinion regarding its place in the body economy. In fact, the number of differing opinions as to its physiology is too great to mention in an article of this size. Suffice it to say, that one group of investigators holds that the thymus is essential to body growth and development. Another group offers strong testimony that its removal is absolutely devoid of danger to the organism and that no developmental changes follow its removal in early life. One thing is certain; to date, definite proof of any internal secretion of the thymus gland, has not been offered.

Anatomically, the thymus is a paired organ of epithelial origin. During the growth of this gland, this epithelial structure is invaded by lymphocytes from the adjacent mesenchyme. These lymphocytes proliferate, extending between the epithelial structures and in time, this lymphoid tissue comes to form the bulk of the gland. There is considerable variation between the normal limits of the weight of this gland at birth, however. As a general average, the gland weighs between 7 and 10 grams at birth and glands weighing 20 to 30 grams, must be considered hyperplastic. Some authors believe that the fullest development of the gland is reached at two years; while others are of the opinion that there is a progressive growth up to the time of puberty. But it is certain, that the gland

undergoes very rapid involution after puberty except in cases of persistent thymus.

Innumerable functions have been attributed to the thymus. Some very careful, and apparently convincing work has been done under careful control, in support of various theories; but always, other workers, performing the same experiments under just as careful control, have gotten diametrically opposite results. A fairly logical theory of the significance of the thymus is that it functions as a lymphatic organ during infancy and childhood when a large number of lymphocytes and leucocytes is needed to combat infections.

Enlargement of the thymus occupies a place of considerable interest from a clinical point of view. The association of enlarged thymus with sudden death has received a lot of consideration and many theories have been advanced for it, such as direct pressure of the enlarged thymus on the trachea, causing asphyxiation; compression of the large vessels at the base of the heart; pressure on the mediastinal nerves; and lastly Svehla's theory of flooding the system with an excess of thymic secretion.

In 1889, Paultauf found that in his cases of sudden death without apparent cause, there was, not only an enlarged thymus, but also, a marked hyperplasia of the lymphoid apparatus and enlargement of the spleen. In the light of recent studies, it has been shown that enlargement of the thymus may exist without the other constitutional anomalies of status lymphaticus. Thymus enlargement can undoubtedly occur without giving rise to symptoms. For this reason, some clinicians hold that it is a rare condition. Others, who have been particularly interested in this condition and who have systematically searched for it, have been able to show that it is really quite common. Thus, Benjamin working in the children's out patient department of the University of Cincinnati, found 225 cases in

*Read at the 51st Annual Meeting of the Arkansas Medical Society, Hot Springs, May 18-20, 1926.

a year's time, only 19 of which (8.4%) showed clinical evidence of enlargement. Other investigators have shown figures practically the same as Benjamin's. DeBuys found in an x-ray examination of 623 successive and unselected cases from one to three years, that approximately 20% showed evidence of enlargement. Mulherin reported enlargement in 21.26% of 111 unselected cases in which 8.1% gave clinical evidence of this enlargement. Mosher found in an x-ray examination of nearly five thousand cases in the Massachusetts General Hospital, where it is routine to x-ray the chests of all children before administering a general anesthetic, that 7% of all children had an enlarged thymus. Even larger figures have been offered by others. Peterson and Miller reported enlargement in 40% to 50% of 120 newborn examined, while Blackfan and Little found it in 48% of 60 infants.

The underlying pathological picture of this enlargement seems to be lymphoid hyperplasia. Weights as high as 150 grams have been reported at post mortem examinations, and, as Warthin has pointed out, this post mortem size and weight may show no real index to size and weight before death. Observation has shown that increase in the anterior-posterior dimension is of more importance than increase in other directions. At the superior opening of the thorax of a young child, the anterior-posterior dimension measures only about 2cms from sternum to vertebral column. In this space and contained between unyielding walls are trachea, esophagus, great vessels and nerves, and the thymus. It is obvious that a greatly thickened thymus would cause compression of the structures behind it and tracheostenosis as a result of this enlargement has been repeatedly demonstrated. No other theory explains the signs and symptoms of enlarged thymus so well as the one of mechanical compression. All the signs and symptoms may not be due to tracheostenosis; but it will be remembered that the great vessels and nerves are also compressed in this so-called critical space of Grawitz, and such compression may be a real factor.

There are three cardinal symptoms of thymus enlargement which may be present in varying degrees of severity and in different combinations. These are: dyspnea, either continuous or remittent, suffocative attacks and stridor. The symptom most commonly

seen is dyspnea. The continuous form is the type most often seen in young infants. The respiratory difficulty increases until the child has a suffocative attack accompanied with intense cyanosis. These attacks are repeated with greater or lesser severity and frequency and death may occur during one of them. Between these attacks the dyspnea is apt to be continuous. In the intermittent forms, the child seems normal between attacks. The other symptom of frequent occurrence is stridor. This is usually inspiratory, though an expiratory stridor is sometimes observed.

The physical signs of enlarged thymus are these: detection of a mass in the jugulum by palpation, enlargement of the area of thymus dullness on percussion, the demonstration of tracheostenosis by bronchoscopic examination or intubation, a special blood picture, and finally a special type of thymus shadow as demonstrated by the x-ray. Occasionally, also, there may be bulging of the manubrium. This is rarely present and palpation of a mass in the jugulum is also infrequently found. The bronchoscopic examination requires great technical skill and is not practical in every day practice. Sometimes the blood picture may be of diagnostic value, especially when associated with status lymphaticus. This consists of high total lymphocyte count with the general picture of chloranemia. This is inconstant, however. That leaves percussion and x-ray examination as the two most important diagnostic agents. In young children, there is a definite area of thymus dullness in the shape of an irregular triangle whose base is at the sterno-clavicular junction and whose apex is the second rib. The sides extend but slightly beyond the margins of the sternum, slightly more on the left than on the right. Dullness extending more than one cm. on either side of the sternum, concealing the note of pulmonary resonance between the heart dullness and the normal area of the thymus dullness, shows, in the absence of other cause, an enlarged thymus. Simply engorged lymph nodes in the anterior mediastinum cause no dullness while caseous nodes do. An important point to be remembered is that dullness directly continuous from thymus to heart is always significant.

The diagnosis of enlarged thymus has been greatly simplified by the x-ray. The x-ray shadow is a wide median one. In some cases the broad shadow continues directly up from

the heart shadow; in others the thymus appears like a broad cap superimposed on the shadow of the heart and vessels. Enlarged bronchial glands give a shadow separate from the heart shadow and not connected with it. This point is of importance. The x-ray gives no indication of the thickness of the gland and on the other hand a very thick gland may give rise to symptoms of compression without showing a greatly increased radiographic shadow. However, the x-ray is the most important and valuable diagnostic agent we have in cases of enlarged thymus.

The prognosis was universally bad until the advent of x-ray therapy, but since its use, the mortality rate has been greatly reduced and the prognosis in cases recognized early enough and properly treated is exceedingly good. Surgical removal of the thymus as practiced before the use of the x-ray, was attended with a very high mortality rate and cases untreated were in constant danger of sudden death.

The technic as outlined by Friedlander and Lange consists of the following: A Coolidge tube backing up a 9½ inch spark is used. The rays are filtered through 4 mms of aluminum and a piece of thick leather. The target skin distance is approximately 9 inches. For children over three months of age, the routine exposure is 25 milliamperes minutes. For children under three months, 15 milliamperes minutes. In mild cases a single dose given over the anterior surface may suffice. In more severe cases 50 milliamperes minutes may be given, 25 anteriorly and 25 posteriorly. The interval between exposures is usually one week unless the urgency of the symptoms suggests more frequent exposures. In very urgent cases daily treatments may be given for two or three days. Improvement in the average case has been noted in 24 to 48 hours after the first treatment. Radium has also been used lately in treating this condition, but x-ray is preferred by most who have used either extensively.

CASE REPORTS

Case No. 1: Baby C; female, aged 2 months.

Complaint: Stridor present at end of inspiration since birth. Loses breath occasionally.

Examination: Percussion shows markedly increased area of thymic dullness. Corroborated by x-ray picture.

Treatment: Repeated exposures of x-ray at one week intervals.

Result: Complete disappearance of symptoms.

Case No. 2: Baby M; female, aged 2 months.

Complaint: Cyanosis at birth and continuing thereafter. Cyanosis constant but less at times.

Examination: Heart negative. Lungs negative. Percussion shows increase in the area of thymic dullness. X-ray picture shows the same.

Treatment: Two exposures to the x-ray. Parents would not return with the baby for further radiation because they said that the baby was well.

Result: Baby improved under the ray treatment, but one year later died suddenly, without apparent cause.

Case No. 3: Baby H; male, aged 2 months.

Complaint: Intermittent attacks of dyspnea and cyanosis. Stridor present at times. Eight attacks in all.

Examination: Percussion and x-ray examination both reveal a markedly enlarged thymus.

Treatment: Extensive radiation.

Result: Complete disappearance of symptoms.

Case No. 4: Baby C; male, aged 11 weeks.

Complaint: Dyspnea and stridor for the past 5 weeks

Examination: Increased dullness in region of thymus. X-Ray examination, positive for enlarged thymus.

Treatment: Routine treatment at weekly intervals.

Results: Improvement of symptoms. Occasionally has some stridor, but not so severe, and no dyspnea now present.

CONCLUSIONS

1. Enlarged thymus is much more commonly present than is usually believed.
2. It has a distinct clinical picture.
3. It is fairly easily diagnosed when the possibility of the condition is borne in mind.
4. It is dangerous to life when unrecognized or when improperly treated.
5. X-ray therapy produces very rapid clearing up of symptoms and disappearance of the enlargement.

MATERNAL AND CHILD HYGIENE*

MARGARET W. KOENIG, M. D.

Associate Director Bureau of Child Hygiene,
Arkansas State Board of Health.

"To cure is a voice of the past; to prevent is the dim whisper of the future."

In the conservation of maternal and child life lies the very essence of our national strength, the basic structure on which rests the foundation of life itself.

In the beginning it was given to woman as her chief biological responsibility, the most sacred of all human functions, the reproduction and perpetuation of the race. "The mother is the keystone of the family unit and the whole arch of human welfare and progress is sustained by the weight which rests from all sides on that keystone." The health, strength and vigor of each adult generation depends upon the health and right living of the children of the previous generation. The starting of life, the parental period is the time when we may build a lasting foundation for health. The assurance of this foundation is an elemental right of every baby yet unborn.

Further, every baby has a right to be well born of normal, healthy parents, under circumstances which insure a healthy and vigorous start in life, as far as possible. The life of every expectant mother should be so safeguarded that the health of her offspring may be beneficially influenced, that she may enter labor in the best possible physical condition, and that at confinement and during the lying-in period, mother and infant will have received proper medical and nursing care.

To secure these rights, education for parenthood must be forthcoming. Fathers and mothers must be made to realize how necessary a foundation of good health is, in order to make parenthood what it should be. Our boys and girls, our prospective fathers and mothers, during the dependent and developmental stage of their being, should have had the care to enable them to pass through infant, child and young adult life into maturity with minds and bodies as nearly perfect as possible, that they may transmit to the multitude of babies waiting to be born, the birthright of a sound body and a sound mind.

They should have learned those habits and acquired those ideals and attitudes which make for a happy outlook upon life, and the greatest opportunity for usefulness to their fellow citizens and their country.

With the onward march of civilization changes have been wrought in all life and activity. Out of the experiences of the past wherein human life, particularly that of the child was based on its value to the State as a defense measure, has merged the newer consciousness of the appreciation of life in its relation to the true heritage of life itself. The child hygiene movement as we know it today is essentially modern for only lately has it been crystallized into an actual human program. Coincident with this recent development dawns the light of a yet newer responsibility—the protection of motherhood.

The responsibility of securing for the mothers the knowledge and care they should have during the child-bearing age, the saving of infant lives and the protection of the family from various detrimental influences is fundamentally a public responsibility.

Medical science has furnished the background, and while it is the business of the medical profession to do both corrective and preventive work, where it is possible, they are too busy with urgent calls of general practice to give the time necessary for educational health work. Besides it is impossible for practicing physicians to reach very many besides their own patients. Then, too, scarcity of medical service, especially in rural areas, together with environmental and climatic conditions makes for a situation that must be recognized. It becomes imperative that some one should interest the people in health as a definite thing.

Every child belongs first of all to his parents, but our civilization is so complex that no parent has all the information or economic means necessary to give the child the best opportunity. Every mother is anxious to do everything she can to give her baby a chance, not only to live but to have good health. But good intentions are not everything, and no matter how great the mother's desire may be, she cannot *alone* insure life and health to her baby. She must know how to keep her baby alive and well, but she must also have the support of the community in doing it.

We are beginning to realize that she is justified in expecting and demanding this help since the child represents potential wealth in

*Read before the Public Health Session, 51st Annual Meeting Arkansas Medical Society, Hot Springs, May 18-20, 1926.

a community and happiness and a richer life to the individual. Whether he is to be an asset or a liability depends on the health investment made by the community, the individual being capable of paying back in returns only on the outlying investment. We know that environmental conditions are closely intertwined with health as one of the chief maternity influences and that the health of the children is the most sensitive indications we have of the hygienic and sanitary conditions of a community and that where the infant death rate is highest will be found the worst place in our community house-keeping. "Community health is no better than its weakest element." The intelligence of its people is recognized by the health and saving of baby lives.

It is not enough to teach mothers and children how to keep well, it is essential that the community provide the necessary materials; proper housing, good sanitary surroundings, normal economic status, pure water, good milk or food supply. It is useless to tell a mother to give her baby clean pure milk if there are no cows. Again, if there are cows she should be assured that they are free of tuberculosis. And, again, if there is a good milk supply she must know how to keep it from spoiling and how to feed her baby. There should be an adequate health service, protection against the communicable diseases, and an accurate birth and death registration.

This is the responsibility of the community at large, and the community consists of the people who compose it. The duty and obligation lies upon all citizens, both men and women.

Each community must recognize and evaluate its own conditions and must want to make a definite improvement. They must want to make it a fit place in which to live. The conditions necessary for this does not take great sums of money, but it does take the intelligence and the desire that comes from understanding. We must have the necessary facilities for keeping health, but we must individually co-operate in gaining health and keeping it. "Upon these two basic points our whole fabric of public health now rests." Education is the foundation-stone upon which these advances will be made.

Although maternity is considered a natural physiological process, under modern conditions of living it can be regarded so no longer by either the medical profession or the public.

The strain on the mother is great. Pregnancy produces far-reaching changes in the body functions of the mother, and these changes make the border line between health and disease a narrow one. She can no longer be left to muddle through her trials alone, unwatched and uncared for. Her health must be safeguarded. It is she who stands between her baby and its future. Shall it be health, physical unfitness or perhaps death for one or both?

The illness and loss of human life from causes associated with childbirth are distressingly high. Prospective mothers simply do not know that parental care is necessary. They share the general feeling that throughout the ages woman have always had babies, that motherhood is a natural state which one accepts when it comes, but need not prepare for.

While parental supervision is necessary for the normal woman it is even more so for the same woman suffering from disease. This not only eliminates a large early infant mortality by virtue of giving the baby a better start, but also if efficiently done, so educates the mother with regard to the importance of breast feeding (the greatest single factor in the saving of baby life), and intelligent care in the feeding and handling of her baby that more than half the battle is won. It reduces to a minimum the accidents and diseases of childbirth and results in improved health for the mother, both before and after the birth of the child.

The importance of this great problem "strikes home when we realize that 3,000,000 women, one-ninth of the women of the country are either pregnant or nursing all the time;" that less than half of all pregnancies are normal; that an estimate of 25,000 women, in young and middle life annually lay down their lives in childbirth from preventable causes. That it leaves one-fourth of all cases more or less invalid, so wounded and so weakened, that the happiness and well being of the home is marred.

The story of the reduction in infant mortality shows a brighter side, it being the greatest single achievement of preventive medicine and public health in the last twenty odd years. 250,000 babies now survive the first year of life who would have died if the 1900 conditions prevailed. This saving has been accomplished largely by a campaign of education, the more general use of pure

water supplies, pasteurized milk, well baby stations, little mother's leagues, the visiting nurse and parental service. Although the infant mortality rate has been cut in two, it is still too high. Of the approximate 2,600,000 babies born alive each year in the United States, 200,000 fail to reach their first birthday. This is because more than half of the babies that die, pass out in the first few days or within the first few weeks of life. Of these early infant deaths, two-thirds are dependent upon conditions affecting the health of the mother during the parental period. In other words these babies died because their mothers have not been able to give them health and vitality enough to win out in the struggle for existence. Add to this 100,000 who never see the light of day, being still births, our infant mortality is appalling.

Seven foreign countries have infant death rates lower than the United States and we lead the world, with the exception of Chile, in the highest maternal death rate among civilized nations. Maternal mortality ranks second to tuberculosis as a cause of death among white women between the ages of fifteen and forty-five years. Our mothers and babies are dying at a rate no other civilized country permits. It is the duty of society to prevent this excessive waste of mothers and babies.

With this picture before us we ask ourselves the question, Is Maternity and Infancy protection necessary? At least two-thirds of the babies and many mothers could be saved by education and intelligent care of the mother. The localities do not know how to save them and have not the money to save them. Federal aid is a step in that direction.

The Act for the Promotion of the Welfare and Hygiene of Maternity and Infancy, represents an immense advance in preventive medicine. It was the first evidence of national recognition of motherhood and offers the means to apply on a national scale, the efforts so successful in the saving of mothers and babies wherever this work has been undertaken locally.

Its purpose was to give financial aid to States unable to start the work themselves and to aid in the extension of programs already under way. The acceptance of the Act is purely voluntary, each State having the right to accept or reject its terms. On acceptance each State is given the right to develop and work out its own plans in its own

way for the accomplishment of the Act within its borders. Although there are wide variations in the methods, all are working toward a common end; the educational stimulus toward better maternal care; and the practical care and supervision of mothers during the entire maternal period and of babies in early infancy.

The sum appropriated was \$1,252,000 to be distributed annually for five years. "Applied over an area so vast and with conditions so complex it could not look for spectacular achievements, but in incentive and hope and educational impulse it can do and is doing great things."

Looking at this from a national viewpoint, since the passage of the Act in 1921, we see forty-three States and the territory of Hawaii have co-operated with the government in this great work. The State Bureaus of Maternity and Child Hygiene were designated as the functioning bodies. In the past two years of Sheppard-Towner activity, 400,000 women have been reached. 74,000 expectant mothers have been instructed in the hygiene of maternity. Hundreds of these mothers had never consulted a physician until actual suffering compelled them; hundreds had not called a doctor until they were "taken sick"; that is, in the throes of labor; many had received very little or no postnatal care; and others had no one to stand by in the hour of need, no one but the husband, or chance neighbor.

More than half a million children have been examined as to many of whom no physician had been consulted since birth. These children were found to have the usual number of defects and disabilities. Parents were found who were taking these things as a matter of course, chiefly, through ignorance of the most fundamental principles of hygiene. Others who knew some of the dangers, delay in seeking a remedy. On the other hand, there are families in large isolated sections, both rich and poor, who find it almost impossible to secure medical care because of inaccessibility to doctors. To parents such as these this benevolent Act has brought a message of hope and cheer.

The mothers of the future will not be overlooked. Twenty-three States have organized little mother's classes. Many States have established infant welfare stations and parental centers. About 40,000 midwives have received instruction. This review gives only a small part of what has and can be done, for

the bulk of the work is educational. The cost has been but two cents per capita.

In Arkansas the Act is meeting a most urgent need. Through the medium of a Traveling Child Health Unit, the work is being presented to the State. Being distinctly a pioneer activity the holding of children's health conferences has been the chief avenue of approach. Over 400 of these have been held at which 15,000 of the State's little ones have been given a stripped physical examination in the presence of parents and instructions given as to their care. A large number of these children were referred to the family physician for further examination and treatment.

Prenatal conferences, examination of mothers, hygiene instruction to school children and adolescent girls, midwife conferences and classes, educational exhibits of health reels, posters, food and sanitation, a survey of crippled and other handicapped children, special eye, chest and orthopedic clinics, consultation with physicians regarding special cases, inspection of children's homes, birth and death registration campaigns, home visits, assisting in health demonstrations at county and State fairs, the establishment of four child health centers, the subsidizing of six county activities, the co-ordination and supervision of State nursing activities, and the preparation of press and other publicity have been integral parts of the State program.

Staff members have endeavored to get before all clubs and organizations and have reached thousands of people with all phases of the work. Every county in the State has been visited by some member of the staff, and over fifty by all.

The work has only begun. We must continue and improve our equipment. We must aim toward higher standards, the encouragement of better obstetrical service, a more equal distribution of doctors in relation to need, and of hospitals. The midwife must be placed under more strict supervision and required to qualify for her work. And above all, we must increase the number of public health nurses.

It is hoped that in time the benefits of the activity will be so well realized that the States will assume the entire burden themselves; but this is going to take time, especially for some States.

We must foresee the future and tune in with the vision as expressed in Browning's Rabbi

Ben Ezra, "Grow old along with me. The best is yet to be, the last of life, for which the first was made; our times are in His hand, who saith, 'A whole I planned, youth shows but half; trust God, see all, nor be afraid! * * * and which strikes a more modern note in the words of Dr. Caroline Hedger, who says, * * *

"My idea of the well child is one built for the long haul. It is not the child of today or tomorrow. It is the child of the future who is going to last through the long haul and that means work, harder work every year. It means the child has to have vitality stored up, sufficient to compete and hold his own, in a very swift industrial system. It means he has to have some vitality left over, to run a government, a very difficult government, too. He has got to raise a family if we go on. These are necessities. There is one more that seems important and that is that every child should be built on such a foundation of health that he has enough vitality after these things are done to grow a soul."

Here lies my wife, here let her lie;
She's now at rest—and so am I.

Here lies a man who here did start,
Was lame one leg, yet sound at heart.

WHAT A SLAM!

She lived with her husband fifty years, and died in the confident hope of a better life.

A bigot iz a kind of human ram, with a good deal ov wool over hiz eyes, but no horns.

—Josh Billings' Humorous Epigrams.

Whoever treadeth on this stone,
I pray you tread most neatly,
For underneath the same doth lie
Your honest friend, Bill Wheatly.

He heard the angels calling him
From the celestial shore;
He flopped his wings and away he went
To make one angel more.

—The Kablegram—By his son.

THE DUTIFUL COW

Sacred to the memory of Eben Harvey, who departed this life suddenly and unexpectedly by a cow kicking him on the 15th of September, 1853. Well, done, thou good and faithful servant.

THE JOURNAL

OF THE

ARKANSAS MEDICAL SOCIETY

Owned by the Arkansas Medical Society and Published under the direction of the Council.

WILLIAM R. BATHURST, Editor
810-812 Boyle Building, Little Rock, Arkansas.

Published Monthly. Subscription \$3.00 per year; single copies 25 cents.

Entered as second-class matter, June 21, 1906, at the postoffice at Little Rock, Arkansas, under the Act of Congress of March 3, 1879.

Acceptance for mailing at special rate of postage provided for in Section 1103, Act of October 3, 1917, authorized August 1, 1918.

The advertising policy of this Journal is governed by the rules of the Council on Pharmacy and Chemistry of the American Medical Association.

All communications of this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the State. Notice of deaths, removals from the state, changes of location, etc., are requested.

OFFICERS OF THE ARKANSAS MEDICAL SOCIETY

J. M. LEMONS, President.....	Pine Bluff
HENRY THIBAUT, President-Elect.....	Scott
G. E. TARKINGTON, First Vice-President.....	Hot Springs
T. F. KITTRELL, Second Vice-President.....	Texarkana
J. H. FOWLER, Third Vice-President.....	Harrison
R. J. CALCOTE, Treasurer.....	Little Rock
WM. R. BATHURST, Secretary.....	Little Rock

COUNCILORS

First District—THAD COTHERN.....	Jonesboro
Second District—J. L. JONES.....	Searcy
Third District—M. C. JOHN.....	Stuttgart
Fourth District—W. T. LOWE.....	Pine Bluff
Fifth District—W. P. COOKSEY.....	Magnolia
Sixth District—B. C. MIDDLETON.....	Texarkana
Seventh District—DEWELL GANN, SR.....	Benton
Eighth District—ANDERSON WATKINS.....	Little Rock
Ninth District—LEONIDAS KIRBY.....	Harrison
Tenth District—THOMAS DOUGLASS.....	Ozark

The Wordly Hope men set their Hearts upon
Turns Ashes—or it prospers; and anon,
Like Snow upon the Desert's dusty Face,
Lighting a little hour or two—was gone.

—*Rubaiyat.*

Nature, so far as in her lies,
Imitates God, and turns her face
To every land beneath the skies,
Counts nothing, that she meets with base,
But lives and loves in every place.

—*Tennyson.*

A full account of the results of the investigation of the American Medical Association into the claims of the Koch Cancer Foundation and a history of the purposes behind the proposition will be found under "Propaganda for Reform" in the Journal of the Association for May 8, 1926, pages 1469-1472.

Editorials.

OUR 1926 MEETING

Dr. J. M. Lemons of Pine Bluff, our president-elect, will succeed Dr. H. D. Wood of Fayetteville, who presided at the Hot Springs' meeting, May 18-19-20.

Officers elected were as follows:

President-elect—Henry Thibault, Scott.

First Vice-President—G. E. Tarkington, Hot Springs.

Second Vice-President—T. F. Kittrell, Texarkana.

Third Vice-President—J. H. Fowler, Harrison.

Treasurer—R. J. Calcote, Little Rock (re-elected).

Secretary—Wm. R. Bathurst, Little Rock (re-elected).

Councilors:

Second District—J. L. Jones, Searcy (re-elected).

Fourth District—W. T. Lowe, Pine Bluff.

Sixth District—B. C. Middleton, Texarkana (re-elected).

Eighth District—Anderson Watkins, Little Rock.

Tenth District—Thomas Douglass, Ozark. Little Rock was chosen for the annual meeting place in 1927.

There was a good attendance, 391 members registered, and with the visitors and ladies, the total reached upwards of 500.

It is gratifying to note that the Council took a firm stand on the matter of Ethics and it is possible that further action will be taken later unless the code adopted by the State Society is more strictly observed. The Council endorsed and commended the stand taken by the Sebastian County Society on unethical conduct charged upon several of their members. Attention was called to charges in at least two other counties wherein members were said to have offended in a similar way, also to the unbecoming advertising in newspapers of certain hospitals.

The Council approved a resolution to erect a suitable marker at the place where the first legal human anatomical dissection was made. The following committee was appointed by President Wood to take charge of the matter; J. H. Lenow, chairman, H. Moulton, J. P.

Rumyan and Robert Caldwell. An appropriation not to exceed \$200.00 was allowed for the purpose.

The Reference Committee, composed of St. Cloud Cooper, H. Thibault and M. E. McCaskill, passed on all committee reports and submitted comments on some of them. Their report on the Student Loan Fund was very favorable and the comment in part was as follows: "It is probably true that the rules of conduct and the suggestions toward honorable living and practice that go into these will prove of greater value to these students than the actual money advanced." Further comment was as follows:

"In view of the fact that early impressions are most lasting and that the medical profession is a noble one only so far as its individual members exhibit true nobility of character the Reference Committee suggests that this society elect or appoint one or more of its members to deliver a total of not less than three lectures each scholastic year to the entire student body of the Medical School of this State. These lectures to be solely on the subject relating to "Medical Ethics" and what is considered as honorable conduct in a physician. That these lecturers appear as representatives of this Society and that the secretary of this Society shall make arrangements with the Dean and faculty of our State Medical School as to the time and place that the lectures shall be delivered."

The report of the Health and Public Instruction Committee also was endorsed by the Reference Committee, which made one addition to the rules adopted on the pledge card for midwives as follows:

"Should I violate the foregoing articles of this contract, I agree to abandon the practice of midwifery in Arkansas until such time as the State Board of Health shall designate for the renewal of my pledge."

A detailed report, too long to be inserted here, was made by the Committee on Hospitals. This and other features of the meeting will be commented upon in later issues of the Journal. The entire proceedings of the meeting will be published in the July issue.

Among the outstanding papers read at the Scientific Sessions were those of our distinguished guests, Dr. James W. Kennedy of Philadelphia, Dr. Fred H. Albee of New York and Mr. Eugene Lies of Chicago. In this connection it may be mentioned here that Dr. Kennedy was made an honorary member of

the Arkansas Medical Society—the first to receive this distinction outside of the State. His name will appear on the roster and he will receive our publications and all announcements that are sent out to the entire membership.

PATENT OFFICE MAGIC

Under the caption above, Arthur J. Camp has done a real service by exposing certain weaknesses in the administration of the Patent Office, by which the public may be victimized by fake medicines and "treatment" rendered more or less plausible by what many may regard as an official indorsement and which serve only to enrich unscrupulous adventurers in a noble profession. The article in question is in the current issue of Mencken's American Mercury.

Can one imagine a patent tape worm trap being seriously considered and patented? It was done. The trap was swallowed by the patient after a couple of days abstention from food. The idea was that the hungry worm would pounce on the bait.

As the worm removed the bait a spring was released and Mr. Worm was captured. A silken string attached to the trap, the other end protruding from the patient's mouth, sufficed to bring back trap with the worm attached!

Then there was the Oxydonor (giver of oxygen) whose "inventor" Sanche coined the word "Diaduction" and had thousands fooled by his clever literary stuff and made a fortune out of the fake electric contraption which had nothing electric about it. His patent was issued in 1897. Fifteen years later another governmental department pronounced it a fake and the invention was barred from the mails as fraudulent. Yet the same thing, as a patented article, was presumably a "new and useful invention!"

In 1921 Serghison of San Francisco patented a consumption "cure" called "Sav-rite." Olive oil, squills, nettles, bitter almonds and red poppy flowers were the ingredients. The official examiner, who chanced to be a physician, refused to recommend it for patenting. The "inventor" appealed to the board. Not a member of it was a physician, yet on the testimony of the inventor and a physician, said to be competent, but whose only record seems to have been his arrest for illegally prescribing liquor, the board overruled the physician and the patent was issued.

In reply to objections raised by medical bodies the patent office officials said, "The Patent Office does not undertake to justify its actions in granting any particular patent!"

The remedy, of course, is simple. Patents applied for, in remedies or devices affecting the public health, should be passed on, not by a board of laymen, however honest, but by competent medical authority. Some countries refuse to permit patents on any medical preparation or device on the ground of public policy. Of course, medical ethics would not permit a Medical Society physician to patent a remedy, but the trouble is that, like the poor, the unethical sharks, who think more of profits than of the public health, are ever with us.

Editorial Clippings.

THE ECLECTIC EXAMINING BOARD

The May 15th issue of the Journal of the American Medical Association, the annual State-Board number, gives the statistics for 1925 of the licensing of physicians in the different States in the Union. Speaking editorially under the heading of "State House-Cleanings in Licensure" it tells of the results of the diploma mill investigation in Connecticut, and continues: "In Missouri, also, a new licensing board has been established; the two medical schools of that State have been prosecuted, and conditions in licensure have been much improved. Whether the charters of the two diploma mills are to be revoked is to be decided by the Missouri Supreme Court. One of these mills, the Kansas City College of Medicine and Surgery, in spite of legal proceedings, issued diplomas to four "graduates" during 1925, to whom the Arkansas Eclectic Board promptly granted licenses—as well as to fifteen other graduates of this school whose diplomas bore earlier dates. It is evident, therefore, that a vigorous house-cleaning in licensure is much needed in Arkansas also."

This tells the tale. In Arkansas there were licensed by examination during 1925 48 physicians. Twenty-two of these were from Class A schools, 2 from Class B, 20 from Class C schools and 4 from miscellaneous colleges. A year after the worst diploma mill scandal of recent years, the Arkansas Eclectic Examining Board licenses by examination nineteen graduates from one of the two schools involved in this scandal, a school not recognized as being an eclectic school by the

National Eclectic Medical Society, a school whose graduates are refused recognition in its own home State, and whose graduates are recognized only by the Arkansas Eclectic Examining Board, by Alaska, Arizona, the District of Columbia and Massachusetts. Unless Arkansas laws are changed, unless Arkansas has a real investigation of the scandal similar to that in Connecticut, as long as this school exists Arkansas will be the dumping ground of its "graduates" and approximately half of the physicians licensed in this State will be decidedly inferior in intelligence and in education and training.

After the close of the last session of the General Assembly the Bulletin published the following, an opinion which its editor still holds, "That experience is a valuable teacher doesn't seem always to hold true. The same mistakes have been made, not once, but three times in succession. Of all of them the worst has been the postponement of the drafting of the bill until the session of the General Assembly has begun. In the short space of sixty days it would be impossible for any ten busy physicians to draw up a bill in such a form that it would meet the approval of all ten of them.

"The drafting of the Medical Society's next bill should be commenced at least a year, and preferably eighteen months, before the convening of the Assembly into which it is to be introduced. It should be worked over by the Committee on Legislation until it meets with the unanimous approval of the committee. Then it should be printed and submitted to the entire Society for discussion and criticism. Such changes as were thought desirable could be made and the bill submitted to the public, particularly to the legislators. The need for such a law and all the arguments for it should be carefully compiled and given the widest publicity.

"An organization of physicians with representatives in every county should be perfected to secure support for the bill both before and after the election of representatives and senators, and should be continued until after the Assembly convenes to make its final effort in the passage of the bill through the Assembly.

"Unless some such program as this is followed, the Arkansas Medical Society will never be able to get a satisfactory medical practice law in Arkansas."—*The Bulletin, Pulaski County Medical Society.*

Abstracts.

CONSERVATIVE THERAPEUTICS

Thomas Ordway, Albany, N. Y. *Journal A. M. A.*, May 29, 1926). feels that the remarkable development of surgical procedures and the discovery and application of methods of utmost importance in preventive medicine and public health, have led to neglect in medical teaching and practice of certain very valuable therapeutic aids. They have also created an intensive urge for the discovery of specifics and the premature announcement of amazing and false cures, by even the most prominent foreign and American university clinics. Ordway is of the opinion that conditions would be greatly helped if all practitioners and investigators established an ethical basis of procedure which required minimal criteria for diagnosis and treatment. Furthermore, in the treatment of every case we should constantly emphasize the dictum of Hippocrates that "the aim of the physician should be to do good to his patient, or, at least, to do no harm." Surgery will discover new methods, and pharmacology and immunology will assist in placing medicine on a more rational scientific basis; but there are to Ordway's mind two serious defects in medical education and medical practice which have been potent factors in the development of the so-called cults—the neglect of the proper instruction and use of physical therapy, and the consideration and general application of psychiatry. Fortunately, a council on physical therapy has been formed during the past year by the American Medical Association. The personnel of this council is a guarantee that we shall have the same conservative and critical judgment in matters relating to physical therapy that has been of such great value as a result of the work of the Council on Pharmacy and Chemistry. This idea of the interrelation of the physical and mental is expressed in the dialogue of Plato. It may be described as "*mens sana in corpore sano.*" A lack of the practical knowledge of applied psychiatry has caused many to claim good results by the most diverse types of treatment in similar pathologic conditions. It would surprise many of the searchers for hypothetic, or microscopic, foci of infection, or the advocates of specific measures in certain types

of arterial hypertension, to realize how many of those and other diverse complaints are relieved by encouragement and reassurance, and by rest, fresh air, suitable food, adequate elimination and reeducation. Reeducation, particularly relating to environmental and vocational readjustment, is of the greatest importance in medicine and is frequently lost sight of in the heedless application of so-called specifics. Clinical therapeutic research should be an intensive search for the truth, with adequate controls, because of the variability of the factors dealt with. The importance and usefulness of the medical profession, instead of being diminished, will always be elevated exactly in proportion as it understands itself, weighs justly its own powers, and professes simply what it can accomplish.

Personal and News Items.

At a recent meeting of the Royal College of Surgeons of Edinburgh the Fellowship degree was conferred on Dr. Dewell Gann, Jr., of Little Rock.

Dr. Harry Williams of Pine Bluff won the State title in the trapshooting tournament, recently held in Little Rock. His score was 196 out of a possible 200.

There was a joint meeting of the Faulkner County and Pulaski County Medical Societies, May 24th, 8:00 p. m., at the Hotel LaFayette, Little Rock. C. E. Benefield of Conway and A. C. Kirby of Little Rock appeared on the scientific program. Refreshments were served.

A group of El Dorado physicians have recently purchased the Graham Apartment house and will remodel the building for offices and clinic. The staff will be composed of Drs. H. H. Niehuss, A. D. Cathey, surgeons; G. D. Murphy, pediatrician, and S. J. McGraw, internist. The building and improvements will cost over \$25,000. Additions to the staff will be announced at a later date.

Several Pine Bluff physicians have formed a clinic and have leased the second floor of the Bridges Building for their offices and laboratory. The clinic will consist of O. G. Blackwell and B. D. Luck, surgeons; J. S. Jenkins, orthopedist and radiologist; C. K. Caruthers, internist and anesthetist; A. A. Hughes, ophthalmologist, otologist, rhinologist and laryngologist, and Paul Power, pediatrician.

WANTED—Salaried appointments for Class A physicians in all branches of the medical profession. Let us put you in touch with the best man for your opening. Our nation-wide connections enable us to give superior service. Aznoe's National Physicians' Exchange, 30 North Michigan, Chicago. Established 1896. Member the Chicago Association of Commerce.—(Adv).

The annual meeting of the Mid-Western Association of Anesthetists will be held October 11-14, 1926, in Kansas City, Mo., at the same time as the Clinie Week there. Headquarters, Baltimore Hotel. An interesting and attractive program is in the process of making. Any physician or dentist desiring to read a paper should send the title to the secretary very soon. Ralph M. Water, M. D., Sec.-Treas., 425 Argyle Bldg., Kansas City, Mo.

The College of Medicine of the University of Arkansas held its forty-seventh annual commencement exercises June 3. Degree of doctor of medicine was conferred on twenty-four graduates. An address was given by Dr. A. C. Millar on "Living Temples." Governor Terral, ex-officio chairman of the University Board of Trustees, also addressed the graduates and the degrees were conferred by President John C. Futrall of the University. Diplomas in nursing were awarded the following young women, who have completed the three-year prescribed course in the University Training School for Nurses: Mary Fain, Nell Mae Swafford, Mamie Marie Garrison.

CORRESPONDENCE

To the Journal Arkansas Medical Society:

At a recent meeting of the Bradley County Medical Society we were appointed as a committee to ascertain the opinion of the people in our county regarding the building of county hospitals by taxation. We were also requested to ask our representative to help to pass a general law by which each county can vote a tax for building hospitals if they so desire. We find the people in Bradley County favor such law and we would like to know if other counties favor this move. Other States already have such laws and many county hospitals are built by a tax on real estate.

A general law enacted by the Legislature will give each county the right to vote for or

against a tax for hospital purposes, and this, of course, brings the issue to those directly concerned—the tax payer—but the medical society of each county can give favorable publicity to this move and we feel sure the thinking people of Arkansas will welcome this movement.

C. N. Martin,
Rufus Martin,
W. T. Thompson,
W. T. Fike,
Committee.

KANSAS CITY ANNUAL FALL CLINICAL CONFERENCE

The Kansas City Clinieal Society will hold its annual fall conference October 11, 12, 13, 14, 15, 1926, on the Roof Garden of the New Hotel President, Kansas City, Missouri. Offering again for the fourth year a program of clinics, lectures, demonstrations, motion pictures and unusual scientific and technical exhibits. Lectures and clinics by eminent specialists, operative and diagnostic clinics at all allied Hospitals in Greater Kansas City.

The following is a partial list of distinguished guests who have accepted invitations to lecture and hold clinics:

Thomas McCrea, M. D., Professor of Medicine, Jefferson College, Philadelphia, Pa.

Frank H. Lahey, M. D., Professor of Clinieal Surgery, Harvard Medical College, Boston, Mass.

Wm. McKim Marriott, M. D., Professor of Pediatrics and Dean School of Medicine, Washington University, St. Louis, Mo.

Edward L. Keyes, M. D., Urology, New York City.

Edwin W. Ryerson, M. D., Professor of Surgery, Rush Medical College, Chicago, Ill.

Irving W. Potter, M. D., Obstetrics and Gynecology, Buffalo, N. Y.

Perey Brown, M. D., Radiologist at St. Luke's Hospital, New York City.

Royal S. Copeland, M. D., Senator, Public Health, New York City.

John M. Cahill, M. D., Professor of Otolaryngology, Harvard Medical School, Boston, Mass.

PULASKI COUNTY AUXILIARY MEETS

At a recent meeting of the Woman's Auxiliary of the Pulaski County Medical Society at the home of Mrs. R. F. Darnall on the Hot Springs Highway, Mrs. Dewell Gann, Sr., of Benton, President of the State Auxiliary, made the following address:

Dear Ladies—Wives of the Doctors:

I enter office as your President with good will in my heart for all and malice toward none.

In fact, I think the "Legend of the Golden Vase" would fit this organization of the doctors' wives exactly; for if in it we put our best, out of it will we get only the best.

The keynote of my administration will be "Better Homes."

I quote here from Mrs. McReynold's address when she took the chair last year as State President of Texas: "No combination of circumstances can ever, or should ever, take away from woman the power and the privilege inseparably connected with her natural and supreme obligation—the perpetuation of the human race."

When I speak of better homes I mean real homes where love reigns supreme and where Dad is King and Mother Queen, and the children are taught the second great commandment and the first with a promise, "Honor thy father and thy mother; that thy days may be long in the land which the Lord thy God giveth thee."

Does not that fit our health program? Do not better homes mean better education, sanitation, and health? In fact, God created us for this special purpose to make a real home for our husbands and children, relatives and friends, and when we fail to do that we have fallen far short of our duty.

What was the favorite song of our soldier boys? "Keep the Home Fires Burning." Truly a haven of rest for the storm-tossed, world-weary wanderer. "Be it ever so humble, there's no place like home."

When we follow in the footsteps of our Saviour, The Great Physician, does it not mean the little thoughts of love and the little deeds of kindness and the lovely things said of each other that form the golden links of the chain that reaches from earth to heaven?

In closing, I will say that I hope this will be a year of close co-operation, love and understanding. Let each one of us strive to avoid taking credit to ourselves; for, after all, what is fame?

"What is Fame? An empty bubble
Floating on the sea of trouble;
Hard to win, but easy lost;
Seldom valued at its cost.

Sought by all; by few attained,
Not enjoyed when it is gained;
Like the echo of the horn,
Like the dew of early morn,
Glittering for awhile, and then
Soon it vanishes again."

Obituary.

DR. W. R. BROOKSHER, SR.

By B. V. Ferguson.

On May 19, 1926, Dr. W. R. Brooksher, deacon in the First Baptist Church of Fort Smith, was called to his reward on high. In the death of Dr. Brooksher the church sustained a great loss. He had been a member of the First Baptist Church of 22 years, and was the oldest deacon from the point of service. The entire membership of the church was grieved by the loss of this good man. During this long period of service the church recognized in him one of its wisest and trusted counselors in all the affairs of the church. As a deacon he measured up to the requirements of the New Testament in that holy office. He was loyal and untiring in his efforts to promote every phase of the work of the Kingdom of our Lord Jesus Christ.

Dr. Brooksher likewise was interested in and loyal to the entire program of denominational work, having served for many years on some of the boards. He was thoroughly missionary in spirit and practice. In his going the denomination has lost one of the strong men of Arkansas. Dr. Brooksher was easily one of the first citizens in his city. He was noted for his brotherly love in the fellowship of the church, his big-heartedness toward the poor of the city and in his love and concern for the troubled and needy. He had enshrined himself in the hearts of a great multitude and was held in the highest esteem by all the people of this city.

This pastor has never known a man who was more universally loved by all classes of people.

The church and community will be richer for all time to come because of his life among us.—*The Baptist Advance*.

County Societies.

FRANKLIN COUNTY

(Reported by THOS. DOUGLASS, Sec.)

The Franklin County Medical Society met June 8th, at Ozark. President E. W. Blackburn, presiding.

Present: Drs. Campbell, Gibbons, Porter and Douglass.

Subject of discussion: "Dystocia." All present participated in the discussion, and it was the opinion of all that there had been an unusually large number of cases of difficult labor in recent months.

Program for the next meeting: Papers by Drs. Campbell and Douglass.

It was agreed that regular meetings would be held hereafter. All members are urged to attend.

CRAWFORD COUNTY

(Reported by O. M. BOURLAND, Sec.)

One of the most interesting meetings and with largest attendance ever held by the society was that of May 27.

"X-ray Diagnosis of Gall-bladder Disease" by D. A. Rhinehart of Little Rock, was the feature of the scientific program.

Dr. Thomas Douglass of Ozark read a paper on "Nudity," in which he displayed his customary versatility.

A banquet was given at 7:30 p. m. for the members and guests. That the sumptuous repast provided by the church ladies was enjoyed, was attested by unanimous asseveration.

As a result of this meeting, the society will carry on with renewed inspiration.

MONROE COUNTY

(Reported by W. L. BOSWELL, *Secretary*)

The Monroe County Medical Society met in Brinkley, May 11, 1926.

Present: Houston, Phipps and Boswell of Clarendon; Terry and Darnall of Holly Grove; Stout, C. H. McKnight and E. D. McKnight of Brinkley. Visitors: S. F. Hoge, F. W. Carruthers and P. E. Thomas, Jr., of Little Rock, and Throgmorton of Brinkley.

The following scientific program was presented:

"Focal Infections," by Dr. Hoge. A paper and x-ray pictures on "Fractures and Their Treatment," by Dr. Carruthers. An interest-

ing and complicated case of "Bell's Palsy," by Dr. Stout. All papers elicited lively discussions.

On May 12, Dr. Mason of the Trachoma Hospital, Russellville, held a "Trachoma Clinic" in Clarendon. A large number of people had their eyes examined. A few cases of trachoma of long standing were found, and several cases of granular lids, which were indicative of early trachoma. One case was operated upon.

Most of the physicians of the county visited the clinic during the day and received helpful instructions on diagnosis and treatment of trachoma.

ST. FRANCIS COUNTY

(Reported by J. O. RUSH, Sec.)

The St. Francis County Medical Society met in regular session in Forrest City, June 1, at 2 p. m., with a well attended meeting.

Present: Winter, Powell, Chaffin, McDougal, McCown, Brown, Boggan, Haney and Rush.

Dr. E. D. McKnight of Brinkley, was a guest of the Society and the principal speaker of the meeting. His subject was, "The Acute Abdomen."

Other papers presented were: "Pellagra," by Dr. Chaffin; "Scarlet Fever," Dr. McCown; "Contagious and Infectious Diseases," Dr. Boggan; "Intero Colitis," Dr. Haney.

On motion, Dr. P. P. Boggan was elected a life member of the society without further payment of fees or assessment. He has practiced his profession for a half century and is now acting as County Health Officer.

The next meeting of the Society will be held Tuesday, July 6, in the Circuit Court room of the County Court House, at 2 p. m.

The program for this meeting has been arranged, and is a public health meeting to which everybody is invited. The speakers are: Hon. C. P. J. Mooney, Editor Commercial Appeal, Memphis; Dr. C. W. Garrison, State Health Officer, Little Rock; Dr. Margaret W. Koenig, Associate Director, State Board of Health, Bureau of Child Hygiene, Little Rock. This is a most attractive array of talent, and the subjects to be discussed are the most important that engage the attention of the general public.

Book Reviews.

Practical Helps in the Study and Treatment of Head Injuries.—By Adolph M. Hanson, M. D., Formerly Neurosurgeon to Evacuation Hospital No. 8, American Expeditionary Forces. With 91 Illustrations. Published by Richard G. Badger, The Gorham Press, Boston.

In preparing the book, the author had in mind the physicians who must have a practical working knowledge of how to treat head wounds on short notice, because of the innumerable automobile accidents, when prompt attention is absolute necessary.

Gould and Pyle's Pocket Cyclopedia of Medicine and Surgery.—Third edition, revised, enlarged and edited by R. J. E. Scott, M. A., B. C. L., M. D., New York. Published by P. Blakiston's Son & Co., 1012 Walnut Street, Philadelphia. Price \$2.50, with thumb index \$3.00.

This book consists of brief articles, alphabetically arranged on various subjects in the field of medicine and science. It includes drugs, anatomical terms, tests, tables, etc., and describes all facts of general interest concerning them.

Modern Methods of Amputation—By Thomas G. Orr, A. B., M. D., F. A. C. S., Professor of Surgery, University of Kansas. One Hundred Twenty-five Illustrations. Published by the C. V. Mosby Company, 1926. Price \$3.50.

This book will be found to be a valuable aid in the simplification of amputation technique, to stimulate a realization of the importance of careful surgery, helps to keep function foremost in the mind of the surgeon and leads to a realization that the job is not finished until the patient is fitted, if possible, with an artificial appliance.

Diseases of the New-Born—By John A. Foote, M. D., Professor of Diseases of Children, Georgetown University Medical School. Illustrated. Published by J. B. Lippincott Company, Philadelphia.

"The greatest danger," says one of the contributors to this book, "which beset the baby on its way into the world is the interruption of its respiratory function. Next importance are injuries to the blood vascular system resulting in hemorrhage. The most important of these are the intracranial hemorrhage." On this subject, Dr. Foote first appears in this book in Chapter II.

Ophthalmic Neuro-Myology.—A Study of the Normal and Abnormal Actions of the Ocular Muscles from the Brain Side of the Question. By G. C. Savage, M. D., LL. D. Thirty-nine Full-Page Plates and Twelve Illustrative Figures. Sec-

ond Edition. Published by the Author, 167 Eighth Avenue, North, Nashville, Tennessee, 1926.

The author of this book presents a study of actions of the ocular muscles, from the brain side of the question. The book might be entitled "The Muscle Study Made Easy," but he has chosen "Ophthalmic Neuro-Myology." Dr. Savage presents this problem on the normal and abnormal actions of ocular muscles in a very interesting and instructive manner.

Scoliosis. Rotary Lateral Curvature of the Spine.—By Samuel Kleinberg, M. D., F. A. C. S. Published by Paul B. Hoeber, Inc., New York, 1926. Price \$6.00.

From the author's preface we quote the following paragraph: "This book is written primarily for the orthopedic surgeon, but a conscious and painstaking effort has been made to describe the pathology, etiology, prognosis and treatment of scoliosis in such a manner that the general practitioner will find it as easily comprehensible as the inherent difficulties of the subject will permit. It is my earnest hope that it will help the family physician readily to comprehend the essentials of this multiform deformity, and thus place him in a better position to advise his patient in regard to it."

Therapeutics, Materia Medica and Pharmacy—By Samuel O. L. Potter, A. M., M. D., M. R. C. P. Lond. Fourteenth Edition. Revised by R. J. E. Scott, M. A., B. C. L., M. D. Published by P. Blakiston's Son & Co., 1012 Walnut Street, Philadelphia. Price \$8.50.

The first fifty-seven pages of this book are given over to "Introduction," follows with Part One, "Materia Medica and Therapeutics." Arrus to Zingiber (alphabetically arranged). Part Two, "Pharmacy and Prescription Writing." In this section of the book, Prescription writing receives full consideration. In the third part the subject of "Special Therapeutics" is treated of elaborately, in the form of Index to the treatment of diseases, as laid down by accepted authorities. The "Appendix" contains numerous Tables, Diagnostic hints, Latin terms and phrases, etc.

The Surgical Clinics of North America—(Issued serially, one number every other month). Volume VI, Number I (Philadelphia Number—February, 1926.) 325 pages with 136 illustrations. Per clinic year (February, 1926 to December, 1926.) Published by W. B. Saunders Company, Philadelphia, Price, paper, \$12.00; Cloth, \$16.00 net.

One of the clinics in this issue is by Dr. Wayne Babcock on "Demonstration of Spinal Anesthesia." In acute abdominal infections

he says, "spinal anesthesia is unsurpassed. Nothing acts so quickly or gives such perfect relaxation of the abdominal wall with as little protoplasmic disturbance. Thus the operation may be performed with celerity and with the minimum of functional disturbance so important in peritonitis, while the associated stimulation of peristalsis and paralysis of the sphincter relieves tympany, and may cause the colon to be emptied during the operation.

International Clinics—A quarterly of Illustrated Clinical Lectures and Especially Prepared Original Articles. Edited by Henry W. Cattell, A. M., M. D., Philadelphia. Volume 1. Thirty-sixth Series, 1926. Published by J. B. Lippincott Company, Philadelphia.

In this issue Dr. H. W. Cattell and Major Coupal present a very interesting review of the Progress of Medicine for 1925. He says, "Notwithstanding the wonderful new aids to medicine, back to physical diagnosis and the treatment of the individual patient rather than the disease from which he is suffering, continues to gain ground, while reaction against too much dependence upon laboratory methods per se continues. Not that there has been any diminution in the use of such tests, but there appears to be by those clinicians who are keeping up with the times, a more proper interpretation of their advantages and limitations and cost of time and money in proportion to their real value."

A Bipolar Theory of Living Processes.—By George W. Crile. Edited by Amy F. Rowland. Published by The MacMillan Company, New York, 1926.

The contents of this book is described in Part I, "Introduction"—The Development of Bipolar Theory; Part II, "The Argument"; Part III, "Summaries of Researches"; Part IV, "Summaries of Certain Generally Accepted Facts in Their Relation to a Bipolar Organism"; Part V, "Conclusions and Summaries." In the chapter on Mechanism of Memory, the author says: "We believe that starting from infancy, parents, companions, the natural forces of the environment, teachers—all the infinite elements of the experience of life are creating in the brain matrix with its infinite capacity, an infinite number of action patterns which make up the changing personality of the individual—a personality which changes with every stimulus until final equilibrium or death ends the life of the individual.

The Surgical Clinics of North America.—(Issued serially, one number every other month.) Volume V, Number VI. Philadelphia Number—December, 1925. 223 pages with complete index to Vol. 5, and 50 Illustrations. Per clinic year (February, 1925, to December, 1925.) Paper, \$12.00; Cloth, \$16.00 net. Published by W. B. Saunders Company, Philadelphia.

One of the articles in this number is on "Peritonitis—Peritoneal Infection," Clinic of John B. Deaver. He says: "The two outstanding conditions in peritonitis are inflammation and toxemia. The diagnosis is based on the presence of pain, localized or generalized, and vomiting in the early stage, rigidity of the abdominal muscles, tenderness, and more or less limited inspiration depending upon the extent of the peritoneal involvement. Late in the case there is abdominal distention, persistent regurgitant vomiting due to intestinal paresis, rapid and weak pulse, more or less cyanosis, depending upon the degree of toxemia, which means vasomotor paresis, hypoperistalsis, or the absence of peristalsis, obstipation with inability to pass gas, the peritoneal facies, cold perspiration of the forehead and often of the body as well, and the bright eye and active brain.



D-ZERTA is especially recommended for the diet in diabetic and obesity cases. It fills the need for a dessert, appetizing in appearance, appealing in aroma, agreeable to the taste, yet containing **no** sugar. Made of purest gelatin, saccharin, tartaric acid and vegetable coloring.

20 SERVINGS—\$1.00

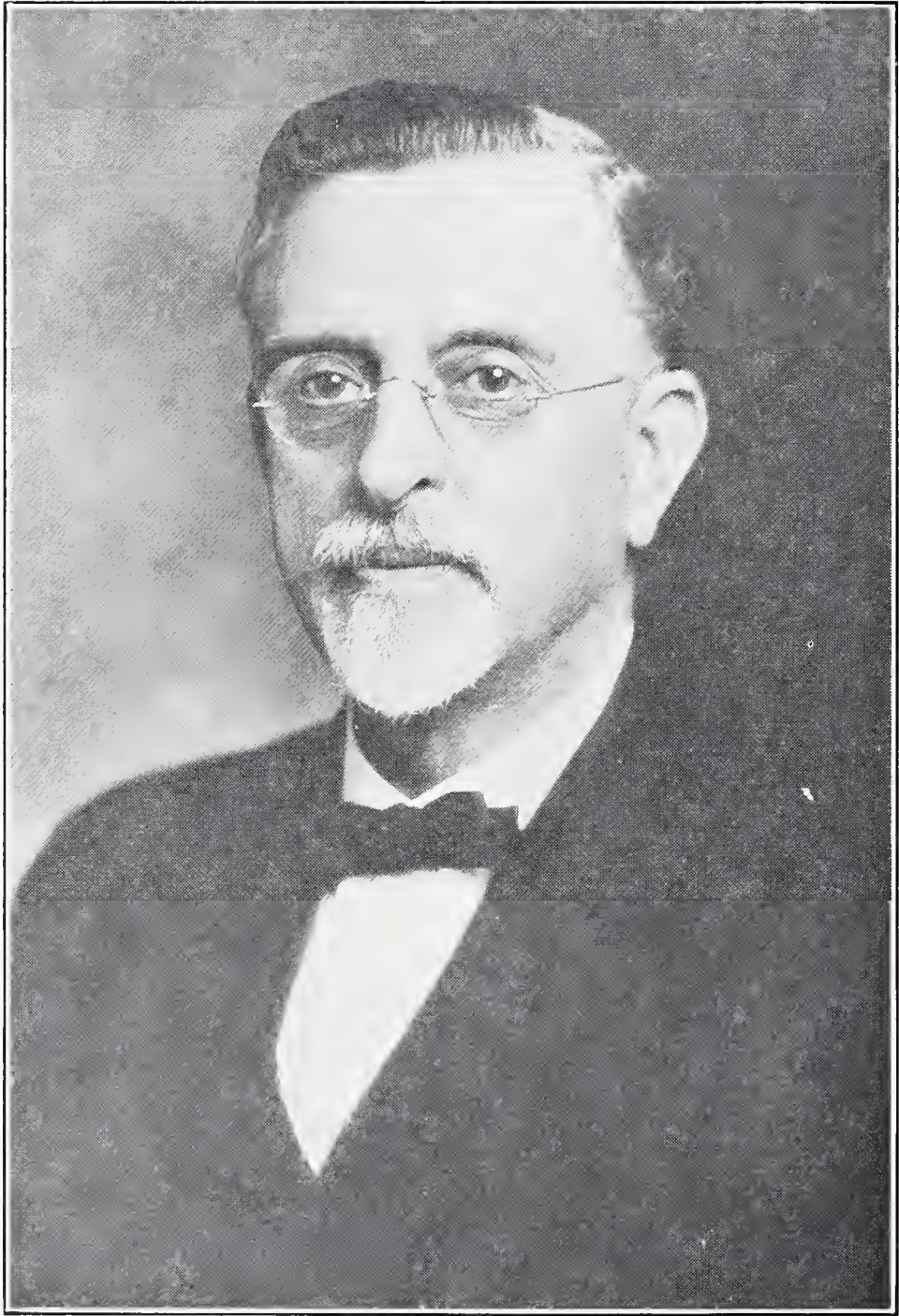
Assorted flavors in each package

THE JELL-O COMPANY, Inc.

Le Roy, N. Y.

Bridgeburg, Can.

D=Zerta
A Sugar-free Dessert



J. M. LEMONS, M. D.
President, Arkansas Medical Society
1926-1927



Officers Woman's Auxiliary of the Arkansas Medical Society: Mrs. C. Travis Drennen, Hot Springs, President-Elect; Mrs. Dewell Gann, Sr., Benton, President; Mrs. C. W. Garrison, Little Rock, Retiring President. (Snapped at Hot Springs During Second Annual Convention.)

Photo by Alta Smith

THE JOURNAL

OF THE Arkansas Medical Society

PUBLISHED MONTHLY UNDER THE DIRECTION OF THE COUNCIL

Vol. XXIII.

LITTLE ROCK, ARK., JULY, 1926

No. 2

Original Articles.

ANNUAL ADDRESS*

H. D. Wood, M. D., Fayetteville, President,
Arkansas Medical Society.

Members of the Arkansas State Medical Society: I could not help but feel that you made a mistake when you named me for your president to wield the gavel and start this Society on the second half of its first century. Some of you may be in full accord with this statement before these meetings are over.

It is gratifying to me that you selected Hot Springs to begin the last half of the first century of our life as a Society. Should I ever feel the need of renewing my youth I know of no better place to begin the good work than our own Hot Springs. It is my earnest wish that every member of this Society renew his obligations to organized medicine and reconsecrate his life to this noble profession, at the beginning of our next half century.

I deem it a great privilege to have been a member of this Society for fifty years; and a greater privilege to have the pleasure of helping to start it off under such favorable circumstances on the second half of its first century. Let us hope that there may be more than two of its present members who will be present and take an active part in celebrating the first centennial of its life. And may they feel just as vigorous and enthusiastic as we do who have lived and worked for the first fifty years of its existence.

This Society has passed through times of trial when it required strong men to guide it safely through the breakers. Such times may come again. But let us hope that we may have men of courage who will help to carry us safely over the dangerous shoals.

It became my duty once since I have been your president to sit with the Councilors of this Society when it took men of courage to sustain the action of a County Society that had passed sentence on one of its members who had violated the principles of medical ethics we have adopted as our standard of conduct towards each other and towards our clientele. I could not help but feel that the action of the Council on that occasion would do more to increase respect for the principles of medical ethics than anything else that has been passed upon by this body in a long time. If we are to live and continue to grow in usefulness we must adhere to a high standard of ethics in all things pertaining to our professional conduct.

In the years gone by some of our members have so far forgotten themselves that they have allowed their appetite for alcohol or some drug to lead them into intemperance. Some have even gone further and become confirmed drinkers or drug habitues. When such practices become confirmed habits it is sufficient grounds for the revocation of a license to practice medicine in this state. After due warning for these offenses our licensing board should have the courage to enforce this law; for such practitioners endanger the lives of our people and bring reproach upon a great profession. And yet, I believe that every physician who is qualified to practice medicine should have the right to prescribe alcohol, or any preparation containing alcohol, and have his prescriptions filled under the same or stronger restrictions than that of prescribing narcotics. Yet some of my friends think this would be putting temptation in the way of too many doctors and their patients.

It has also been reported to me that there are practitioners of medicine in some counties of this State who have been guilty of destroying the lives of unborn babes for a price or to cover up their own sins.

*President's Address, Fifty-first Annual Meeting, Hot Springs National Park, May 18, 1926.

We all realize that men of King David's kind are not all dead, neither have all the Bathshebas gone out of business. But the doctor who would destroy the life of an unborn babe unlawfully, should lose the right to practice medicine anywhere. Nay, more, he should be classed among murderers of the basest sort and suffer the full penalty for this sin.

Let this Society resolve to enforce the law to the letter against this class of practitioners in our great State.

Train robbing or hold-ups was once rather a common occurrence in this State. But our Legislature passed a law with a severe penalty for even attempting a hold-up on a train. I have been told that no attempt has been made to rob the passengers on a train in this State since then.

Can we not take such a stand against this detestable practice that it will drive every abortionist from our State or put them in the penitentiary where they belong.

If we are to live and continue to do a great work in organized medicine in our State we should encourage all worthy physicians to join our County Medical Societies. This will make them members of the State Medical Society. Then they may become members of the greatest medical organization in the world—The American Medical Association.

We should take special interest in all worthy graduates of accredited medical institutions to see that they get started right early in their professional career. They should become acquainted with the older men in the profession, and not forget that some of these men who have grown gray in years of service have learned much that they need to know and will be glad to give them help and counsel when called on in the right way.

It is not numbers we need so much now, as we need men who have come into the profession for a noble purpose and with high ideals of service for their fellow men. With good roads and the means of rapid travel there is scarcely a county in the State in which the people should lack medical and surgical attention if the medical men we now have are willing to do their fair share of charity work, or real hard work that many men of our profession have done in former years under more trying circumstances.

May I say a word to the committee in charge of the Student Loan Fund? Would it not be well to select from applicants for

loan, those of high moral character, free from evil habits? It would not look well to furnish any young person money to burn that would be injurious to them physically and mentally while pursuing their course of studies.

I wish to say here that I was very much pleased with my visit to the Medical Department of the University of Arkansas last year. I was surprised to see the splendid equipment of this department of our University. The opportunities offered medical students for gaining a knowledge of medicine in all of its branches here is something to make every medical man in the State feel proud.

When compared with the opportunities some of us older men had when medical students, it makes us feel that there has been wonderful progress made in teaching medical students. And this same marvelous progress is evident in every branch of medicine. The surgeon may have reason to feel that there has been the greatest progress made in his branch of the profession; and yet the medical man knows much about diseases today that was only guess work a few years ago. But let us not forget that there is much we do not know and it behooves us medical men to continue our investigations of diseases and their causes. This desirable end can only be attained by giving our medical students a broader and deeper knowledge of every branch of medicine. It is because of a better knowledge of these fundamental sciences that success has crowned the efforts of our research workers. Fifty years ago what physician ever dreamed that he could cure or save the life of the child when almost in the death grip of diphtheria? The surgeon then stood helpless in the presence of a perforating ulcer of the appendix, calling it general peritonitis. Not so today, his skill has lengthened the general average of human life by years.

Then, there is one other distressing or deforming disease I will mention—Pott's disease of the spine. A bone transplant by the skillful surgeon has prevented the distressing deformity of this disease. When I was attending the Clinic of Dr. Albee in New York last summer he made this statement before he began to do an operation for Pott's disease of the spine. "Of all the operations that I do, a bone transplant for Pott's disease of the spine has been the most successful."

What a comfort it must be to any one who is able to prevent such a distressing deformity.

I did not have to wait quite eighty years for the honor of being your president to come to me, but I thank you for the honor that came without seeking on my part, and I feel glad that I am here to take some part in starting our State Medical Society off on its fifty-first year under such a favorable outlook. It was with some feeling of pride that I succeeded in securing two master surgeons of America to come to this meeting with helpful messages, Dr. J. W. Kennedy of the Joseph Price Hospital of Philadelphia, who was with us at our meeting two years ago in Fayetteville; and Dr. Fred H. Albee of New York City, who comes to our State and our famous health resort for the first time.

I thank you for the honor you have bestowed on me.

BOOK REVIEWS.

Handbook of Diseases of the Rectum.—By Louis J. Hirschman, M. D., F. A. C. S., Ex-Chairman, Section on Gastro-enterology and Proctology, A. M. A. Fourth edition, revised and rewritten, with 52 illustrations, mostly original, and five colored plates. Published by The C. V. Mosby Company, St. Louis, 1926. Price \$6.50.

The non-surgical methods are described in this book in those conditions where they have been found of value, and the technic of operative measures under local anesthesia are given in a clear manner and as simple as possible.

Abdominal Operations.—By Sir Berkeley Moynihan, K. C. M. G., C. B., Leeds, London, England. Fourth edition, entirely reset and enlarged. Two octavo volumes totaling 1217 pages, with 470 illustrations, 10 in colors. Published by W. B. Saunders Company, Philadelphia, 1926. Cloth \$20.00 net.

It has been ten years since the appearance of the last edition of this work. During this time many advances have been made in abdominal surgery. This excellent work begins with preliminary preparation and sterilization; then goes into the actual technic, carries through the complications and sequelae, right on to after-treatment. In the chapters on complications and sequelae, Sir Berkeley gives several tables showing, from thousands of cases, the complications that may follow operation. Numerous case histories, quoted from the author's own practice and those of other distinguished surgeons, give the book a clinical character that sets it apart from the usual book on abdominal surgery. Throughout the

book, he teaches great respect for the principles of technic and their application.

Sir Berkeley's wide experience with a great wealth of material, both in a large private practice and during his active service in the war, combined with his international reputation as a surgeon of unusual skill, make this edition of *Abdominal Surgery* a most desirable addition to the library of every surgeon in active practice.

Here lies the body of William Wix,
One Thousand, Seven Hundred & Sixty Six.

Blest is John Boyse in his heavenly shade,
But oh, how soon did his umbrella fade!

The devil owes most ov his success tew the
faekt that he is alwuz on hand.

—Josh Billings' Humorous Epigrams.

Advice iz like kastor-ile, easy enuff to give,
but dreadful uneasy tew take.

—Josh Billings' Humorous Epigrams.

"Experience is a good schoolmaster," but
reason iz a better one.

—Josh Billings' Humorous Epigrams.

Hie jacet Tom Shorthose,
Sine *tomb*, sine *sheets*, sine *riches*,
Quit vixet sine *gown*,
Sine *cloake*, sine *shirt*, sine *britches*.

Here lies I and my three daughters,
So much for drinking the Cheltenham waters;
If we had stuck to Epsom salts
We never would have laid in these here vaults.
The Kablegram, Mt. Morris, Ill.

FROM THE NURSES' EXAMS.

Astounding returns in the hospital at Pasadena, California:

Paresthesia is a symptom rather than a disease. By paresthesia is meant spontaneous sensations such as tingling, numbness, fornica-tion, etc.

—Tonics and Sendatives Jo. A. M. A.

LET'S TALK ABOUT YOUR BUSINESS

Inspired advertisement in the Los Onglaze Examiner:

My business is to serve the Lord, but I keep a gentleman goat to accommodate the neighbors, and help pay expenses. Terms \$1.50. No business done on Sunday. W. B. Turner, 549 Redfield avenue.

—Tonics and Sendatives Jo. A. M. A.

THE JOURNAL

OF THE

ARKANSAS MEDICAL SOCIETY

Owned by the Arkansas Medical Society and Published
under the direction of the Council.

WILLIAM R. BATHURST, Editor
810-812 Boyle Building, Little Rock, Arkansas.

Published Monthly. Subscription \$3.00 per year; single
copies 25 cents.

Entered as second-class matter, June 21, 1906, at the
postoffice at Little Rock, Arkansas, under the Act of
Congress of March 3, 1879.

Acceptance for mailing at special rate of postage pro-
vided for in Section 1103, Act of October 3, 1917, autho-
rized August 1, 1918.

The advertising policy of this Journal is governed by
the rules of the Council on Pharmacy and Chemistry of
the American Medical Association.

All communications of this Journal must be made to it
exclusively. Communications and items of general inter-
est to the profession are invited from all over the State.
Notice of deaths, removals from the state, changes of
location, etc., are requested.

OFFICERS OF THE ARKANSAS MEDICAL SOCIETY

J. M. LEMONS, President.....Pine Bluff
HENRY THIBAUT, President-Elect.....Scott
G. E. TARKINGTON, First Vice-President.....Hot Springs
T. F. KITTRELL, Second Vice-President.....Texarkana
J. H. FOWLER, Third Vice-President.....Harrison
R. J. CALCOTE, Treasurer.....Little Rock
WM. R. BATHURST, Secretary.....Little Rock

COUNCILORS

First District—THAD COTHERN.....Jonesboro
Second District—J. L. JONES.....Searcy
Third District—M. C. JOHN.....Stuttgart
Fourth District—W. T. LOWE.....Pine Bluff
Fifth District—W. P. COOKSEY.....Magnolia
Sixth District—B. C. MIDDLETON.....Texarkana
Seventh District—DEWELL GANN, SR.....Benton
Eighth District—ANDERSON WATKINS.....Little Rock
Ninth District—LEONIDAS KIRBY.....Harrison
Tenth District—THOMAS DOUGLASS.....Ozark

COMMITTEES

SCIENTIFIC PROGRAM—R. J. Calcote, Little Rock,
chairman; A. S. Buchanan, Prescott; R. H. T. Mann, Tex-
arkana.

SCIENTIFIC EXHIBIT—C. E. Oates, Little Rock, Chair-
man; Homer Scott, Little Rock; D. E. White, El Dorado.

MEDICAL LEGISLATION—Earle H. Hunt, Clarksville,
chairman; J. W. Walker, Fayetteville; Thad Cothern, Jones-
boro.

STUDENT LOAN FUND—E. F. Ellis, Fayetteville, chair-
man; J. H. Lenow, Little Rock; Wm. R. Bathurst, Little
Rock; G. A. Warren, Black Rock.

NECROLOGY—Frank Vinsonhaler, Little Rock, chairman;
L. Kirby, Harrison; E. E. Barlow, Dermott.

HEALTH AND PUBLIC INSTRUCTION—C. W. Garrison,
Little Rock, chairman; F. Michael Smith, Pine Bluff; C. S.
Pettus, Little Rock; President and Secretary of State So-
ciety.

CANCER CONTROL—Dewell Gann, Jr., Little Rock,
chairman; John S. Jenkins, Pine Bluff; J. C. Hughes, Hoxie.

INFANT WELFARE—A. C. Kirby, Little Rock, chairman;
N. D. McCormack, Ft. Smith; H. W. Browning, Little Rock.

HOSPITALS—J. D. Southard, Fort Smith, chairman; D.
A. Rhinehart, Little Rock; J. T. Palmer, Pine Bluff.

Editorials.

THE PRESIDENT'S ADDRESS

In the annual address of the President, de-
livered May 18, at the Hot Springs' meeting
of the Arkansas Medical Society, H. D. Wood
of Fayetteville, made reference to matters of
more than passing importance and to which
it is in order to call the attention of the ab-
sentees, who were so unfortunate as not to at-
tend the meeting. (The address appears in
the front section of this issue).

First, we will quote from the report of the
Reference Committee: "The high standards
of professional honor and fearless conduct
commended in your President's address are
heartily endorsed. It is hoped that every mem-
ber who has heard, or who will read this ad-
dress will try to foster in himself and en-
courage in his professional associates those
nobler aims so simply and forcefully ex-
pressed."

Referring to the great advances made in
the last half-century in medical science, Dr.
Wood reminds us that there still is much to
learn and urges continued investigation of
the causes and treatment of diseases. He la-
ments the fact that there are unscrupulous
practitioners who engage in illegal operations
and he urges stringent laws and enforcement
of them in the ultimate hope of driving from
the State the abortionists or putting them in
the penitentiary where they belong.

One other matter referred to by Dr. Wood
has to do with the Volstead Act, or rather
with the Arkansas State-wide prohibition, or
bone-dry Act. But Congress in the Volstead
Act properly permitted physicians to pre-
scribe alcohol in medicinal quantities. The
argument of the more radical prohibitionist,
of course, is that to permit physicians to pre-
scribe intoxicants in even the smallest quan-
tities, affords a loop hole for unscrupulous
doctors to make it possible for their friends,
posing as patients, to violate the law. But
conscientious physicians would no more do
that than to break any other law and when
the Legislature adopted the stringent pro-
vision prohibiting physicians to prescribe al-
cohol or a druggist to fill such a prescription,
they invaded the province of the physician
and cast a reflection on the integrity of the
profession.

Personal and News Items.

Dr. C. H. Lutterloh of Jonesboro is making a tour of Europe, and will return sometime in October.

Dr. R. A. Jones, who has been living in Houston for a number of years, has moved to Perry.

Dr. Floyd Clardy, Hot Springs, has removed his office to Suite 409 Thompson Building.

Dr. S. F. Hoge, Little Rock, announces his practice will be devoted to Clinical Medicine, Diagnosis and Consultation.

The residence of Dr. J. H. Smith, located on the Little Rock-Hot Springs highway, was totally destroyed by fire June 18.

Dr. and Mrs. D. W. Goldstein of Fort Smith recently motored to Little Rock and Memphis, and visited relatives in Mississippi.

Dr. Morgan Smith of Little Rock has been appointed division commander for Arkansas of the Sons of Confederate Veterans.

Dr. A. D. Gillum of Rover was recently elected member of the Yell County Board of Education. Among the other members is included Dr. C. B. Lindsey of Plainview.

Among the Arkansas physicians visiting in Little Rock during the past month included F. O. Mahony, El Dorado; G. S. Brown, Conway; T. W. Hardison, Morrilton.

Dr. J. S. Wilkins, Hot Springs, announces removal of office from Arkansas National Bank Building to Suite 503 Thompson Building.

Dr. J. M. Williams of Pine Bluff, retired physician, died at his home June 30. He is survived by his wife, a daughter and his son, Dr. Harry Williams.

Dr. H. A. Higgins and Dr. N. W. Riegler announce removal of offices to 1-3-5 Urquhart Building, formerly occupied by the late Dr. C. E. Bentley.

The National Tuberculosis Association has issued a new booklet on Standards for the Diagnosis, Classification and Disposition of Cases of Pulmonary and Glandular Tuberculosis.

The thirty-ninth annual meeting of the Medical Society of the Missouri Valley will be held jointly in Omaha and Council Bluffs, September 15-16-17. Headquarters—Hotel Fontenelle, Omaha.

Dr. W. T. Rowland of Arkadelphia married Miss Birdie McKinney of Greenville, N. C. The wedding trip included many cities and resorts in the east. They will return to Arkadelphia to make their home.

This is the year that the American Medical Association Directory goes to press, and if you want to be listed as an ethical practicing physician in the official blue book of the profession, your dues for 1926 must be paid.

Dr. Thad Cothorn of Jonesboro will spend the month of July at Fort Riley. He plans taking his family with him by auto, going through the Ozarks to Kansas City and Leavenworth. Later they will visit Yellowstone Park, returning by way of St. Louis.

ERRATA—In our June issue, we published an article by Dr. Margaret W. Koenig on "Maternal and Child Hygiene," and we wish to correct a typographical error in the 3rd, 15th, 17th, 20th and 28th paragraphs. The word spelled "parental" should read "prenatal."

The next examination given by the American Board of Otolaryngology will be held in Denver, Colorado, at the University Hospital on Monday, September 13, 1926. Application should be made to the Secretary, Dr. H. W. Loeb, 1402 South Grand Boulevard, St. Louis, Missouri.

WANTED—Salaried appointments for Class A physicians in all branches of the medical profession. Let us put you in touch with the best man for your opening. Our nation-wide connections enable us to give superior service. Aznoe's National Physicians' Exchange, 30 North Michigan, Chicago. Established 1896. Member the Chicago Association of Commerce.—(Adv).

THIS MEANS YOU!
MAIL DIRECTORY INFORMATION
CARD PROMPTLY

During the month of June, every physician in the State should have received a Directory information card. Every one is urged to fill out and return the stamped card regardless

as to whether he or she has changed their residence or office address.

This information will be used in compiling the Tenth Edition of the American Medical Directory, now under revision in the Biographic Department of the Association. The directory is one of the altruistic efforts of the Association and is published in the interest of the medical profession, which means ultimately in the interest of the public. It is a book of dependable data concerning the physicians and hospitals in the United States and Canada.

L. M. Hunter's Epilepsy Cure—L. M. Hunter, M. D., Little Rock, Ark., sells "Dr. Hunter's Rational Treatment for Epilepsy," a crude piece of mail order quackery with the indirect aid and assistance of H. S. Brevoort, M. D., and L. L. Marshall, M. D. The latter is a member of the State Board of Health of Arkansas. The cure itself and its methods of exploitation do not differ widely in their sordid details from the average mail order quackery. A "complete course" of "Dr. Hunter's Rational Treatment for Epilepsy" was submitted to the A. M. A. Chemical Laboratory for analysis. The Laboratory found the "treatment" to consist of capsules containing essentially 0.07 Gm. (approximately 1 grain) of phenobarbital (luminal) per capsule. This alleged "true specific for epilepsy" which "stops seizures from the first day used" is simply phenobarbital (luminal)—a powerful drug of distinctly habit forming tendencies, the indiscriminate use of which is not safe. (Jour. A. M. A., June 19, 1926, p. 1928.)

THE WILLIAM BEAUMONT MEMORIAL FUND

To encourage investigations of alimentary tract functions, Dr. Frank Smithies, Chicago, has presented to the School of Medicine of the University of Illinois, bonds in amount sufficient to yield annually, in perpetuity, not less than \$100.00. This fund is known as "The William Beaumont Memorial Fund" and the income therefrom, as "The Annual Beaumont Memorial Award."

The Award is to be made each year to the research or clinical investigator, who, in the judgment of a Faculty Committee, has contributed the most important work during the year, in the field designated.

The first award will be made in 1927. Manuscripts covering investigations do not have to be entered specifically for the Award

nor is it required that they be submitted to the Faculty Committee. The Award is to be granted by the Committee after it has considered carefully all investigations published during any year in periodicals throughout the United States. Thus, the Award is available to workers in any institution, and is not confined to members of either Faculty or Student body of The University of Illinois.

MEDICAL VETERANS OF THE WORLD WAR

532 West Main St., Louisville, Ky.
May 17, 1926.

Editor State Medical Journal,
Little Rock, Ark.

Dear Doctor:

I wonder if you will be good enough to make an announcement for me. At our wonderfully successful dinner for the Medical Veterans of the World War more than 250 men gave me their cards or subscription blanks asking to be enrolled as members and about a dozen of them wrapped a dollar bill in the subscription blank to pay for their dues for the first year. On the way back from Dallas my grip was rifled and the envelope containing these cards and money was taken. Naturally, I am anxious to get these names again and, especially, to find those who paid their dues. I am giving the Medical Veterans a check for \$25 to cover the loss.

I believe these annual dinners are going to be important factors for the A. M. A. in two ways. Coming early in the session they give a lot of men the opportunity of getting together and hearing the leaders of the profession talk, in a most helpful way about its morale. The publicity and invitations for the meeting secure the attendance of an increasing number of men who were in the Service. Our proposal is to make the Medical Veterans largely social and to preserve the spirit of service in the profession that was shown in the war times. We are going to publish a quarterly which will be devoted almost entirely to personal history of the men who gave service during the War, devoting all the early issues to biographies of those who have passed on.

Thanking you and with assurance of personal regard, I am, Very truly yours,

A. T. McCORMACK,
Secretary.

KANSAS CITY MEETING

Dr. F. H. McMechan of Avon Lake, Ohio, will address the Kansas City Clinical Society on "The Evaluation of Surgical and Anesthetic Risks From the Viewpoint of the General Practitioner."

Dr. McMechan is Secretary General of the Associated Anesthetists and Executive Secretary of the International Anesthesia Research Society and Editor of its official organ, *Current Researches in Anesthesia and Analgesia*, the only American publication devoted to this specialty.

The Mid-Western Association of Anesthetists is holding its sixth annual meeting in Kansas City during Clinical Society week.

One of the principal activities of the anesthesiologist's program is the effort of the International Anesthesia Research Society to prevent needless deaths through the mechanism of a safety-first uniform anesthesia chart. The essentials of this chart are: (1) The determination of surgical and anesthetic risk before operation. (2) Five-minute blood pressure guide and protection during the entire operation period. (3) Remedial therapy and after-cure based on the degree of circulatory depression.

In his lecture, Dr. McMechan will illustrate all his points by means of lantern slides showing the latest information on the classification of operative risks and comparative death rates, as well as the scope and utility of such diagnostic and prognostic tests as Moots' index for operability, the degree of circulation depression, the nerve shock index, the energy index, Grover's blood pressure key, and his interpretations, the breath holding test and vital capacity, Cornell's test for disclosing incipient nephretics, McIntyre's test for vagotonia and sympathicotonia, and the collected results of these tests put to routine use in good, fair and poor operative risks in a surveyed series of cases.

From the data that has become available as a result of this safety-first movement, Dr. McMechan is convinced that the family doctor can readily evaluate the patient's basic reserve vitality even before referring the case for operation and can use this evaluation to forecast the probable outcome very accurately. Surgeons and anesthetists may also use these routine tests for further protection of operative patients.

BATESVILLE MEETING OF THE SECOND COUNCILOR DISTRICT

The Second Councilor Medical Society was formed in Batesville on Monday evening at the court house, when thirty-four physicians were present from Independence, White, Jackson, Sharp and Fulton counties.

Several prominent visiting physicians were present and took part on the program.

The physicians were entertained by members of the Independence County Medical Society at a dinner served at the Arlington Hotel.

The following members were present: J. L. Jones, Councilor, Searcy; A. L. Best, A. M. Elton, C. R. Gray and W. P. Moore, Newport; K. K. Kimberlin, Tuckerman; O. S. Woods, Salem; E. M. Gray, Evening Shade; G. T. Laman, Cave City; K. W. King, Salado; W. A. Wyatt, Rosie; H. G. Burge and S. N. Robertson, Sulphur Rock; T. G. Burge, Judsonia; D. W. Gray, Searcy; Paul Jeffery, Bethesda; I. M. Huskey, Moorefield; R. C. Dorr, J. H. Kennerly, W. B. Lawrence, C. G. Hinkle, F. A. Gray, T. N. Rodman, O. J. T. Johnston, M. S. Craig and L. T. Evans, Batesville.

Visitors: F. W. Carruthers and S. F. Hoge, Little Rock; G. A. Warren, Black Rock; Thad Cothorn, Jonesboro; T. C. Guthrie, Smithville; J. M. Hooper, Batesville; Ben Kelley, Jamestown; R. O. Norris, Tuckerman; J. L. Weathers, Salem, and E. W. Toney, West Plains, Mo.

The following program was rendered:

"Immunity," G. A. Warren, Black Rock.

"Raynaud's Disease," W. P. Moore, Newport.

"Scarlet Fever," Paul Jeffery, Bethesda.

"Instructions from Councilor," J. L. Jones, Searcy.

"Bone Diseases," F. W. Carruthers, Little Rock.

"The Kidney and Its Functions," S. F. Hoge, Little Rock.

"Medical Tolerance," Thad Cothorn, Jonesboro.

"Tonsilleectomy," M. S. Craig, Batesville.

The organization was completed by the election of the following officers:

M. S. Craig, Batesville, president; A. M. Elton, Newport, vice-president; L. T. Evans, Batesville, secretary-treasurer.

The association adjourned to meet again at Batesville the second Monday evening in September.

PROCEEDINGS
OF THE
FIFTY-FIRST ANNUAL SESSION
OF THE
Arkansas Medical Society

Hot Springs, May 18, 19, 20, 1926

HOUSE OF DELEGATES

FIRST DAY

The House of Delegates was called to order by the President, Dr. H. D. Wood at 9:30 o'clock, a. m.

The President appointed the following Credentials Committee: L. Kirby, J. H. Stidham and Anderson Watkins.

After a recess of a few minutes, this committee made the following report:

Your Credentials Committee wishes to report that the credentials of the delegates are in good form and correct and that a quorum is present.

L. Kirby,
J. H. Stidham,
Anderson Watkins,
Committee.

President Wood: Without objection, the report stands approved and the committee discharged. The roll call is next in order.

Secretary Bathurst reported a quorum present.

President Wood: The next in order is the reading of the minutes of the last meeting.

Dr. Henderson: I move the adoption of the minutes of the last session as published in the July, 1925 Journal. Carried.

The President appointed the following as the Reference Committee: St. Cloud Cooper, Chairman; H. Thibault and M. E. McCaskill.

The President's Address was next in order.

President Wood: I have no address for you. Of course, I heard it said that the House of Delegates was a political machine organization. It doesn't make any difference to me what your politics are, but I hope your policies will be good, the thing that will be best for this society. So, as I have said, I have no address for you. I hope your work will be satisfactory in every way. (Applause). I don't feel very strong and we are going to make a little bit of a change. I am going to ask that the President-Elect, Dr. Lemons,

come forward now and take the chair and preside over this meeting.

(Dr. Lemons in the chair.)

Dr. Lemons: This is a very great surprise to me, but my policy is, whenever called to serve, to do the best that I can. I might say while on my feet that there was a delegation from the Eclectic Board or Association that had an appointment with Dr. Wood and Dr. Bathurst to talk some matters over in regard to the formulation of a one-board law for our State. I happened to run on to Dr. Bathurst and he pressed me into service, and so we started for Dr. Wood, but somehow or another we failed to get together. Dr. Wood was waiting for us and we were waiting for him. However, these two eclectic members who were appointed from their society to come and confer with us, talked to Dr. Bathurst and me in regard to a law that might be presented to our coming legislative body in January. Of course they said that they wanted only equal rights, with preferences shown to no one, and they asked that we appoint a committee to confer with a committee from their organization. After thinking the matter over some, this thought came to my mind, and I will give it to you for your consideration: As you know, this legislative body, it is no child's play, it is a man's job, and we have got to become interested all over our State in order to do anything in regard to getting any law that will be beneficial to all concerned. These men, of course, brought up the fact of what the various cults were going to do, that they were going to get a law enacted that would help to bring in these "isms" that we have in our State and give them equal rights with the balance of the profession. So, they said, "Let's get together and get a law that will be equally just to the medical profession. Now, then, gentlemen, it seems to me that each county should get busy and find out the man in their county or councilor district who will be a good man to work

on this committee, and then let these men get together and block out the work that this committee should do; have three men for drawing up a law, and some other men to do some other work, and everybody should see their representatives from their counties and their legislators. You can do this and report to your councilor in your district and let him report to me the men that you have selected, that you think will do good work. We want sane men, we don't want fanatics, because this is a time when we must get down to business, and let's do it in the spirit in which it should be done. I make this as a suggestion to you; but if you think there is a better way to do it, of course, that can be brought out later. I think you should get your councilor from each of your districts and let him know what you think about it and who you think would be a good man to work on this committee. If you want to do that while we are here in session, today, tomorrow or Thursday, it probably will save some time, and he can give me the names and we will try to work it out the best we can.

Reports of the various standing committees were next in order, as follows:

REPORT OF THE COMMITTEE ON SCIENTIFIC PROGRAM

Dr. Bathurst: In the absence of the chairman, I have the written report that I received by mail this morning, which is as follows:

To the House of Delegates:

Attached please find the printed copy of the scientific program, which is a report of your Committee.

It is desired to express to President Wood and Secretary Bathurst an appreciation for their kindly assistance in the preparation of this program.

Respectfully submitted,

W. F. Smith, Chairman.

REPORT OF COMMITTEE ON SCIENTIFIC EXHIBIT

Dr. Rhinehart: I just got here. We have an exhibit. I don't know where it is or where we are going to put it. I will try to find out and have it out for you to see. I hope you will all take the trouble and time to visit the exhibit, because I think it will be entertaining and instructive.

Reports of the Committees on Medical Legislation, Neurology, Health and Public Instruction and Cancer Control were passed.

Dr. Cooper: The chairman of the Cancer Control Committee, Dr. Brooksher, is sick and will not be here.

President Wood: It seems to me, as Dr. Brooksher is very ill, as I understand, we should pause just a moment and have a resolution that the secretary send Dr. Brooksher a telegram, expressing to him our sorrow for him in his sickness.

Dr. Gann, Sr.: I move that the secretary be instructed to send a telegram of regret to the gentleman. Carried.

Reports of the Committees on Infant Welfare, Workingmen's Compensation, Hospitals, and Medical Officers' Reserve Corps were passed.

REPORT OF THE COMMITTEE ON REVISION OF BY-LAWS

Dr. Thibault: The committee has done some work on this matter, but my report has not been reviewed by the other members since it was made up, and I feel, in justice to them, that I ought to defer that report until they get a chance to approve it. With the exception of Dr. Southard, we have been together, and I think we have reached an opinion on the matter; but I would like to have that report approved by at least one or two members of that committee before I submit it. I might have the advantage of a bigger audience by reporting later.

Chairman Lemons: Could you make a partial report?

Dr. Thibault: The conclusion was that, in the essential features, there is nothing in our Constitution except a few amendments that have been adopted that are in direct conflict with the standard constitution that is recommended by the American Medical Association. There are a few differences in wording and a few amendments that might be made regarding the time of meeting and things of that sort that would bring it into exact conformity with the other State constitutions. On the other hand, your committee believes that the Constitution represents, to a certain extent, a memorial to the men who made the Arkansas Medical Society and that, to simply cast it aside, as a whole is an act of irreverence to these men who have built up this society and moulded its constitution during the growth of this society. Now, it is a fad of the day to make radical changes, to throw away your constitutions, whenever the American Medical Association says to meet on Saturday instead of Wednesday and all that sort of stuff, but our Constitution does not disagree with the essential spirit of the constitution as recommended by the American Medical Association.

and the opinion of your committee, with the exception of Dr. Southard, whom I haven't seen in the subject, was that we retain our Constitution as an individual memorial to the men that made it and made the Arkansas Medical Society, and to only revise it in those things that are in conflict with the spirit of the national organization. We feel it would be an act of sacrilege to cast it aside and to adopt a machine-made constitution in its place.

Chairman Lemons: That's a fine report, and if you want to make a further report on it we will give you a chance at the next meeting.

Dr. Thibault: Well, I think there are some details that ought to be changed. That was just our conclusion in regard to simply casting one constitution aside and redrafting another. With the exception of Dr. Lenow, Dr. Vinsonhaler and I felt, we were younger men, and it was simply tearing up the work of the patriarchs of this society for us to go to work and cast this old Constitution aside and submit a machine-made one in its place, and we would rather keep some of the originality of the old one and spend more time and I believe I ought to be given more time—to study the details of this revision so that it would conform in every way. But we were not appointed until rather late, and certain difficulties, personal and otherwise, kept us from giving the time that ought to be given to a matter of the importance this is to the Arkansas Medical Society, and I believe the committee ought to be continued to the next meeting or a new committee appointed.

Dr. Bathurst: That's a good suggestion for the incoming president, who happens to be here this morning, and he will take control of the situation.

Chairman Lemons: I think that committee will stand. Dr. Garrison has just come in.

REPORT OF COMMITTEE ON HEALTH AND PUBLIC INSTRUCTION

Mr. President, and Honorable Members of the House of Delegates:

Sirs:

Your Committee on Health and Public Instruction herewith submits the following report:

Early in the year Dr. W. R. Brooksher, Chairman of your Committee on Cancer Control, proposed that his committee and the Committee on Health and Public Instruction jointly undertake an educational campaign on cancer. A tentative date was set for a conference, but Dr. Brooksher was unable to attend and no opportunity afforded

itself in order for the committee to get together. As cancer control comes definitely within the scope of health and public instruction it would seem that these two committees might be properly consolidated, and if it is desired for special work to be done regarding cancer education the committee would have a sub-committee for this purpose.

Your Committee on Health and Education sent out suitable literature to be used by various ones during Cancer Week as observed by the National Society for the Control of Cancer, the request coming through the State Health Officer. Some 50,000 catechisms on malaria control, previously prepared by a former Committee on Health and Public Instruction, were distributed through the schools of the State.

The committee desires to submit for your consideration a statement regarding the midwife problem of the State. In 1925 the following communication was published and mailed to the State and County officials and to the officers of the various county medical societies:

"The McCrory Branch of the Health Educational Society of America asks your co-operation in demanding more educational qualifications for obstetrical specialists, particularly the midwife, as being licensed to practice in Arkansas. We ask this for the following reasons:

First. That such practice as permitted by the pledge signers of the midwife pledge cards lowers the standard of the medical profession and lowers the opinion of the public relative to Arkansas' medical practitioners.

Second. The pledge card places as the prime important object just the filling out of the birth certificate and the use of Nitrate of Silver and the attendance at the State Board of Health's class conferences, and does not stress necessities for protection for the life of the mother or babe. Therefore the citizens of Arkansas must take it for granted that when it comes to the lives of our helpless mothers and newborn babes that the State Board of Health puts first, the obeying of their rules rather than the saving of lives.

Third. We consider the greatest need to develop Arkansas' citizenship the care of the mother in confinement and of the newly born babe. If they do not need the best of care then, who does?

Fourth. We think the women of our country have causes enough for dreading to become mothers today without the State Board of Health lessening their chance of recovery by licensing untrained women and endorsing the practice of incompetent midwifery.

Fifth. We object to the pledge, because when it is once signed there is no restriction as to qualifications of the one licensed or the conduct afterwards has been granted.

Sixth. Since the citizens of Arkansas are supporting, by taxation, a medical college for the purpose of educating men and women for service in health matters, we think it inconsistent with the principles of education and an imposition upon our intelligent citizenship to permit such practice of midwifery in our State. We believe in the Medical College and not in license being granted midwives to practice where the M. D. should.

Seventh. The H. E. S. feels that there are better ways of handling this problem than by jeopardizing the lives of mothers and babes and by lowering the principles of the medical profession as the midwifery pledge card assuredly does. We are ready and willing to co-operate with any forces which have as their object and ultimate

aim the betterment and safeguarding of health and life in any way.

We shall appreciate a reply to this. Let us know your opinion on the matter.

Respectfully,

McCrory Branch H. E. S.

(Signed) Daisie Shearer, Sec.

Following the receipt of this communication a few of the county societies adopted resolutions endorsing the publication, which in effect was a censure of the policies of the State Board of Health now in effect. Lonoke and Arkansas Counties were two of them. The State Health Officer was advised and invited to address the societies subsequently. After hearing a frank discussion of the subject both societies adopted resolutions rescinding former action and endorsed the policy adopted by the State Health Department. The State Health Officer also addressed a meeting of the M. & N. A. local surgeons at Searcy on the same subject and a unanimous endorsement followed. He also addressed the First District Councilor Medical Society at Jonesboro, after which a unanimous resolution was adopted endorsing the State Health Department's policy.

Subsequent to the publication of the article the President of the McCrory Society, Dr. R. L. Fraser, who inspired the article, was interviewed by the State Health Officer, and after being advised as to the legal status of midwifery and the methods and policies in effect Dr. Fraser admitted frankly that the article was based on misinformation or lack of information entirely and proposed to sign a statement which the State Health Officer would prepare and mail it to the various State and County officials and county societies recalling the article and setting out that it was published without knowledge of the facts, and that after ascertaining the facts he desired to endorse the program as outlined.

The facts regarding midwifery in Arkansas are as follows:

The Medical Practice Acts of 1881 and 1903 specifically exempt the so-called midwife from the terms of the Acts, and there is no statute whatever in any way restricting the practice.

The State Department of Health, acting under blanket authority vested in it under Section 5, Act 96, 1913, which delegates to it supervision over all matters pertaining to public health, realizing that the midwife as she now exists, being ignorant, superstitious and unclean, is a menace to maternity and infancy and thus a distinct public health problem, attempted supervision over same and began to secure information and a list of midwives within the various counties and require them to attend classes of instruction, primarily to advise them of their duties and to restrict their practice. In order to do this it was felt necessary to issue permits and to cause them to sign pledge cards. The pledge is as follows:

1. To report within ten days the birth of every child delivered by me, whether living or dead, to the local registrar or to the Bureau of Vital Statistics at Little Rock, Arkansas.

2. To use silver nitrate in each eye of every infant immediately after birth.

3. Not to give any medicine or tea to mothers or their children unless ordered by a doctor.

4. Not to make vaginal examinations.

5. To attend all classes and conferences in my district unless sick.

6. And to obey all regulations and instructions regarding supplies, technique and care of

patients issued by the State Board of Health relative to Midwifery.

Competent legal advice is to the effect that when the midwife signs this pledge card she is then subject to limitation and may be prosecuted for violation of the pledge and even restricted from practice. The responsibility imposed by the pledge card and the permit has caused a number of the midwives to refrain from practicing altogether, and those who have had the opportunity to attend midwife classes are now equipped with the minimum paraphernalia needed in their work and from authentic reports from a number of physicians are much cleaner and are calling the physicians in consultation more frequently. A similar program has been put into effect by the Mississippi State Health Department, and a recent survey in the form of a letter sent to every physician in the State resulted in the following information:

The circular letter asks this question:

"Do you notice improvement?

1. In the personal cleanliness of the midwives? Yes—78%.

2. In the calling of a physician to abnormal cases? Yes—73%.

3. In the care of the mothers? Yes—67%.

4. In the care of infants? Yes—67%.

5. In the care of their equipment? Yes—72%.

6. In the reporting of births? Yes—81%.

7. Do they refer prenatal cases to you for examination? Yes—33%.

8. Do they refer postnatal cases to you for examination? Yes—33%.

9. If you do see improvement, could you estimate the degree of this improvement on a percent basis? Averaged 47%."

Dr. T. E. Rhine of Thornton, Arkansas, writes the following:

"Kizzie Cone lives in a large negro settlement far out in the country where it is difficult to get a doctor out there for the good white people that are able to pay. So she waits on these negro women and they get along as well as you could expect under the conditions of their homes. I suggest that you just write her to notify you from time to time how she is doing and be sure to report all births. We have some old darkies that come to us to make out the certificates for them till they learn. You do not realize what it would mean not to let those old negro women look after those negroes far out in the country. They would really suffer for attention."

Many similar letters are received from physicians over the State.

Similar work with the midwives throughout the United States is in effect, only one or two States having statutes governing the midwife. South Carolina established a school for midwives and requires that every midwife attend a full twelve months' course before being permitted to practice.

The Southern Medical Association at its meeting in Hot Springs, Arkansas, adopted a resolution requesting a survey of the midwives in the various Southern States and endorsing any movement looking to their education and restriction.

Midwifery is as old as the practice of medicine, and every effort on the part of every government has failed to eliminate it. It was further admitted by resolution at the Southern Medical Association that the midwife is a necessity. This is especially true of Arkansas. In many rural sections where there are no physicians the mothers are wholly

dependent upon the midwives, and in some communities that have few physicians the physicians prefer not to do obstetrical work and desire that the midwife relieve them of this duty, particularly with reference to the colored more or less indigent confinement cases.

Your committee, therefore, feels that this is a very definite public health problem of great magnitude and deserves the sincerest and ablest efforts of the medical profession in bringing a midwife up to a reasonable standard of obstetrical procedure, and it recommends that the methods and policies inaugurated by the State Health Department be endorsed and that the Legislative Committee of the State Society confer with the State Health authorities in framing suitable legislation looking not to the elimination of the midwife but to placing her under reasonable control and requiring a reasonable standard of qualifications within a given time as a prerequisite to her further practice.

Respectfully submitted,

C. W. GARRISON, Chairman.

Report has my unqualified endorsement.

H. MOULTON,

H. A. STROUD,

Committee on Health and Public Instruction.

REPORT OF THE COMMITTEE ON STUDENTS' LOAN FUND

Dr. E. F. Ellis: I haven't any report. I have to depend upon Dr. Bathurst.

Dr. Bathurst: The Committee on Students' Loan Fund received a thousand dollars at the last meeting to assist some worthy student at the Medical Department of the University of Arkansas. We had probably ten or fifteen students apply for the fund; some to buy microscopes, others to go away during the summer and other things. We found one very worthy student, recommended by Dr. Moulton, Dr. Wood, Dr. Wolfermann and others of Fort Smith, who are acquainted with him, and he was given a loan of \$250.00 during the winter session of school, payable \$50.00 a month, with the promise next year, if he needed assistance, that he would receive another \$250.00, and so on during his third and fourth year. That will amount to \$1,000.00. He signs an application which is rather lengthy, a personal and a financial statement, a complete history of his life almost, followed by two pages of rules that he is to be governed by. He seems to be a very worthy student. I suggest, as a matter of record, that a copy of the application for students' loan fund be made a part of our minutes.

Dr. L. Kirby: Wouldn't it be well to make a motion that we receive the report and that the committee be continued. I make a motion to that effect. Carried.

Application for Loan From Students' Loan Fund, Arkansas Medical Society.

To the Committee on Student Loan:

(Date).....
I, of
Full name Home address
and hereby make ap-
Little Rock address
plication for a loan of dollars
(\$.....) from the Student Loan Fund in ac-
cordance with the rules for administration of
Student Loans. I present for your consideration
the following personal statement:

Personal Statement.

Age last birthday.....
Name and postoffice address of father, guardian,
or business agent.....
Occupation of father, if living.....
Are your parents, or any natural or legal guard-
ian, able to defray the expenses of your medical
education in whole or part?.....
If in part, to what extent?.....
Does your parent or guardian know you are ap-
plying for this loan?.....
Are you single or married; if married, how many
children?.....
Is anyone partially or wholly dependent on you
for support?.....
If so, to what extent?.....
Duration of attendance at School of Medicine,
University of Arkansas?.....
Do you expect to graduate from this school?.....
When?.....
Where do you expect to locate after graduation?

Membership in any literary, scientific, or religious
society.....
Membership in any order, brotherhood, labor
union, fraternity, sorority.....
This loan will be used for.....
What are your plans for next year?.....

Possession of any trade, or special skill, in any
remunerative pursuit.....
Experience in other employment; salary last re-
ceived.....
Manner in which vacations are spent.....
What proportion of your expenses has been paid
by your own earnings?.....
Do you carry life insurance?.....

Amount Kind

Company When taken
Have you ever been refused life insurance?.....
If so, why?.....
List of real and personal property, if any, owned
by you or held in trust for you:
Description..... Market Value.....
Annual income..... Do you have the in-
come?..... Name of Trustee and other in-
formation.....

What is the total amount of your present indebt-
edness? Itemize carefully below.
Name and address of Creditor, and state rela-
tionship.....
Amount..... Date contracted.....
Date due..... Interest rate.....
Was a Promissory Note Given?.....

If not at present in debt, have you ever given
your note for money advanced to you?.....
If so, itemize below.
Name and address of Creditor.....

Amount..... Date contracted.....
Date due..... Date paid.....
Remarks:.....

Give name and address of two references, not
connected with the Medical School, who will
testify as to your need of aid, and as to your
good character.....

I hereby certify on my honor that each of the
preceding questions has been carefully answered
and that each and every one of the items con-

tained in the preceding statement, which is made for the purpose of securing a loan, is true. I further acknowledge that I am morally as well as legally bound, and I pledge myself to repay both the principal and interest of the promissory note given, on or before the date fixed therein, and I further promise that I will keep the Secretary of the Arkansas Medical Society informed of my address until the note is paid.

Signed (full name).....
Present Address
Permanent Address
Secretary, Arkansas Medical Society,
Little Rock, Arkansas

Dear Doctor:

.....has made application to the Committee on Student Loans for a loan of.....dollars (\$.....), a copy of which application is attached hereto. The Committee has acted on this request, and you are directed to advancedollars (\$.....) to him (her) taking his (her) note therefor due on or before..... bearing interest at the rate of 6% per annum.

The loan is to be payable in installments of not less than \$10.00 per month beginning.....

Yours very truly,
STUDENT LOAN COMMITTEE.

.....Chairman.
.....
.....
.....

Rules Governing Administration of Student Loan Fund.

Before a loan will be granted, the committee must be thoroughly convinced of the applicant's real need of assistance; and it will be considered a ground for refusal of the application if it is found that a loan is desired as a mere matter of convenience to avoid the necessity of earnest effort on the part of the applicant to obtain the necessary money otherwise. Loans will not be made to students having expensive habits or to those belonging to expensive societies or organizations. In making loans the committee will take into account the moral character of the applicant, his habits of temperance and industry, and his assiduity and success in his studies.

Unless provision to the contrary is made in the instrument of donation, all loans shall, excepting under extraordinary circumstances which in the judgment of the committee justify a departure from this rule, be confined to junior and senior students, and no loan shall be made to a student who has not been matriculated for at least one year.

Except in very extraordinary circumstances, the amount loaned to any one applicant shall not exceed \$300.00 a year.

Each student borrowing shall sign a note for the full amount of the loan. The committee may require the maker of the note to furnish additional security—either an indorser or acceptable collateral. Excepting where a different provision has been made by the donor of the fund, these notes shall draw interest at 6% per annum, this interest to be charged from the date the loan is made.

Loans shall be payable in installments of not less than \$10.00 per month, which payments shall apply toward the reduction of principal and interest. The first payment shall be due not later than six months after the date of probable graduation. In case the borrower leaves college before

graduation, this first installment shall become due three months after the date of leaving college.

Accumulated interest shall be due on the date of the final payment on the principal of the loan.

The Arkansas Medical Society requires further, that the candidate, to be the recipient of the Student Loan Fund, must be a bona fide citizen of the State of Arkansas.

He shall have passed without conditions all of his pre-medical work in the University of Arkansas or some accredited university or college.

He must have passed without conditions the first two years' work in the Medical Department of the University of Arkansas, and must signify his intention of completing the last two years to his graduation in the University of Arkansas, Medical Department.

He must be possessed of sound physical health and of unquestionable moral standing in his community, and, preferably, be identified with some church organization of his choice.

The committee reserves the right to advance a sum of fifty dollars a month out of the fund during the period of the school year, and should the student fail to pass in any of his work, reserves the right to stop further payment from the loan fund and demand the return of money advanced to the student.

The student upon his graduation, as a part of his contract, shall identify himself with the medical profession of the State of Arkansas and engage in the practice of medicine in some locality within the State for a period of at least two years.

At the end of the two years he must satisfy all of his indebtedness to the Loan Fund of the Arkansas Medical Society.

If for any reason upon the completion of his medical course, he may see fit to locate in some other State than Arkansas, his indebtedness to the Loan Fund of the Arkansas Medical Society shall fall due and payable at the time he leaves the State.

REPORT OF THE COUNCIL

Dr. Cothern: This report is more in the nature of reading some excerpts from the mid-winter session of the Council than it is the making of a Council's report, which will come up the last day of the session. The minutes of the mid-winter session were published in the January issue of the Journal, but they were rather lengthy and many of you, I suppose, didn't read them, so we wish to call your attention to some matters that came before the Council.

(See Journal, January, 1926, for Minutes Mid-Winter Session of the Council.)

I want at this time to say a few words not recorded in the excerpts of the minutes just read.

Attention of the Council has been called to a full page newspaper advertisement of a hospital in Little Rock, which we think is very unbecoming of that institution and the physicians in charge.

We wish to compliment the members of the Sebastian County Medical Society for their firm stand on unethical behavior and the action they took in expelling several of their number recently. Since then, I have been informed, the expelled

members have "seen the light" and have been reinstated as members.

We also understand that one or two physicians in Northwest Arkansas are guilty of the same practice that was questioned in Fort Smith. It so happens that in these particular places, the county medical societies are not very active. If this condition is allowed to continue, the Council will act and act severely on those and any others guilty of unethical conduct. Please take this as a warning.

Dr. Cothorn: Now, in supplementing Dr. Lemons' talk this morning in regard to medical legislation, we think, first, that we should find out definitely what we want in the way of legislation and get united on this and do that in time. It is now the middle of May and the Legislature will meet on January 10th, next, I believe. That gives us ample time to get what legislation we want blocked out and have an attorney to pass on it to see that it will stand the test, and then for us to get acquainted with it ourselves, so that we will go before this body united. I have been unfortunate in being a member of the legislative committee for several years and know something of the hardships we get up against there; because, while we call on a doctor to come down and help us, he comes down with no idea of what we want. So he goes and puts out what he thinks is all right, Dr. A. over here will come in with something different, and the legislators themselves don't know what we do want; they don't know what to give us. Now, for goodness' sake, let's get busy. Let each member of the county society meet with his delegate and councilor sometime during this session or this afternoon and select the men and get started to work.

Our final report will come up the last day of the session.

Chairman Lemons: That will be referred to the Reference Committee.

On account of Secretary Walker's absence the report of the State Board of Medical Examiners was passed.

REPORT OF THE SECRETARY

To the House of Delegates, Arkansas Medical Society:

Gentlemen:

I have the honor to make the following report for the past twelve months:

Membership, December 31, 1925, totaled 1,180, an increase of 39 over the same period a year ago.

Membership dues paid for 1926 to date, 1,089, highest yet recorded at this time of the year.

Cash on hand at the close of last year's session.....		\$10,946.78
Interest to July 1, 1925.....		133.41
Received since last year for dues	\$3,584.60	
Received for interest, Secretary's account	4.85	
Received for interest Treasurer's account	274.32	
Received for advertising in Journal	3,224.61	
Received for interest, Journal's account	18.46	7,106.84
		<u>\$18,187.03</u>
Current expenses (List attached)		7,475.04
Cash on hand		\$10,711.99
Notes Receivable (Student's Loan Fund)		250.00
Balance to date		<u>\$10,961.99</u>

This does not include the money collected for the Gorgas Memorial in 1923, original amount \$165.00, with interest to date makes a total of \$182.14. We are holding this money until the soliciting of such funds has the endorsement of the American Medical Association.

It is extremely gratifying to report the activity of our county societies. During the past year they have had better programs and more meetings than ever before.

The privilege of serving as Editor of the Journal has been greatly enhanced by the earnest cooperation of the officers and the county secretaries, for all of which I wish to express my hearty appreciation.

Respectfully submitted,
William R. Bathurst, Secretary.

Chairman Lemons: This will be referred to the Council.

REPORT OF TREASURER ARKANSAS MEDICAL SOCIETY, MAY 18, 1926.

My records show the following financial condition of the Arkansas Medical Society for the year 1925-1926:

Receipts

May 9, 1925, Balance received from Dr. R. L. Saxon....		\$ 4,459.90
June 1, 1925, Received from Secretary	\$2,903.76	
July 3, 1925, Received from Secretary	3,716.53	\$6,620.29
June 1, 1925, Interest on account.....	\$ 35.74	
July 1, 1925, Interest on account.....	96.16	
January 1, 1926, interest on account.....	142.42	274.32 \$ 6,894.61
Total.....		<u>\$11,354.51</u>

Disbursements

Vouchers 191 to 218, inclusive.....	\$7,475.04
Balance on hand May 18, 1926.....	\$3,879.47
R. J. Calcote, Treasurer.	

Chairman Lemons: The report of the Secretary will be referred to the Council.

REPORT OF THE COMMITTEE ON ARRANGEMENTS AND ENTERTAINMENT

Dr. Tarkington: I would like to preface my remarks with the statement that your local committee is justly proud of the fact that they are enabled to get you this beautiful hall for your meetings. We are going to request that in smoking and in using Star Navy that you make use of the cuspidors and smokadors.

I have a telegram that any visiting Rotarians who are members of the medical society are expected to attend the Rotary luncheon here at 12:15 p. m., Wednesday, signed by Milton Nobles, Secretary. He says that invitation stands for the other two clubs, the Lions and the Kiwanis.

We have at the Presbyterian Church at eight o'clock tonight a public session, followed by dancing in this room. Tomorrow night a dance and the President's reception. We have a golf tournament for the doctors through the courtesy of the Hot Springs Country Club. You will use your own handicap. It will not be necessary to qualify for eighteen holes; a cup for the winner and a cup or a trophy, at least, for the runner-up. (Applause.)

President Wood: After that report, I want to say to you that I hope to live long enough to attend one session of the Arkansas Medical Society when there will not be a single individual who will offer to smoke at a session of the society.

COMMITTEE ON HOSPITALS

Dr. Southard: Hospitals are numerous in Arkansas now, and, if the Chairman of the Hospitals Committee goes to work and gets the data that he would like to get to report on 70 hospitals, it would take about a half day to read it, and I haven't done that. As a matter of fact, when I started to get the data I wrote to Dr. Colwell, who is Secretary of the A. M. A. Educational and Hospital Committee, and he told me that he had virtually gotten the information that he thought we wanted. He sent me the questionnaire that he had sent out. So that simplified my work a good deal. It may be that many of you have read the report that he published in the Journal of the American Medical Association. If you have, you have got practically the same data that I have. Therefore, if it is entirely agreeable to the society, I will just hand my report here to the Secretary and let him take care of it, and let it be published in the Journal of the Arkansas Medical Society.

REPORT OF COMMITTEE ON HOSPITALS

We find that there are in Arkansas a total of 70 hospitals. Of these 52 are for community use, population per hospital bed, 696; percentage of beds occupied, 51; percentage of counties without hospitals, 62.6. The following counties, 47 in number, have no hospitals for community use:

Arkansas, Baxter, Boone, Bradley, Calhoun, Clay, Cleburne, Cleveland, Columbia, Conway, Crittenden, Cross, Dallas, Desha, Fulton, Grant, Hot Spring, Howard, Izard, Johnson, Lafayette, Lawrence, Lee, Lincoln, Little River, Lonoke, Madison, Marion, Monroe, Montgomery, Newton, Perry, Pike, Poinsett, Polk, Prairie, Randolph, St. Francis, Saline, Scott, Searcy, Sharp, Stone, Van Buren, White, Woodruff, and Yell.

The State Hospitals are as follows: Arkansas Tuberculosis Sanatorium, Booneville. Established in 1910. 300 beds, average number of beds in use 295. Dr. John Stewart, superintendent.

Arkansas State Penal Hospital. Cummins. Established in 1905. State, general; for prisoners held at the State Farm. 30 beds. Dr. Robert Harding, Medical Director.

Army and Navy Hospital. Hot Springs National Park. Established 1883. 250 beds. U. S. Army.

State Hospital for Nervous Diseases. Little Rock. Established 1882. 2,211 beds. Outpatient Department. Dr. L. R. Brown, Medical Director.

State Penitentiary Hospital. Little Rock. Established in 1876. 100 beds. Dr. P. L. Mahoney, Medical Director.

United States Veterans Hospital. Ft. Logan H. Roots, North Little Rock. Established in 1921. Nervous and Mental. 625 beds. Medical Officer in charge.

U. S. Trachoma Hospital. Russellville. Established 1922. 20 beds. U. S. Public Health Service. Medical Officer in charge.

Arkansas Confederate Home. Sweet Home. Established in 1891. 150 beds. Mr. W. G. McDaniel, superintendent.

Arkansas Penitentiary Hospital. Tucker. Established 1916. 40 beds. Dr. C. J. Ross, Medical Superintendent.

GENERAL AND PRIVATE HOSPITALS OF THE STATE

Moore and Wallis Sanatorium. Arkadelphia. Established in 1921. 10 beds. Average number of beds in use. 4. Dr. J. Shepherd Moore, superintendent.

The Townsend Sanatorium. Arkadelphia. Established 1919. 10 beds. Average number of beds in use 3. Drs. N. R. and C. K. Townsend, Physicians in Charge.

Dorr, Gray, Johnston and Craig Sanatorium, Batesville. Established 1905. 15 beds, average number of beds in use 5. Drs. R. C. Dorr, F. A. Gray and O. J. T. Johnston, Physicians in Charge.

Blytheville General Hospital. Blytheville. Established in 1923. 33 beds. Average number of beds in use 21. Dr. F. L. Husbands, Superintendent.

Bollinger Hospital. Charleston. Established in 1922. 10 beds. Average number of beds in use 5. Dr. W. H. Bollinger, Medical Superintendent.

Faulkner County Hospital. Conway. Established in 1925. 30 beds. Average number of beds in use 15. Mrs. Eva Atwood, Superintendent.

Crossett Hospital. Crossett. Established 1909. 30 beds. Average number of beds in use 18. Outpatient Department. Dr. C. E. Spivey, Medical Superintendent.

DeQueen Hospital. DeQueen. Established 1920. 25 beds. Average number of beds in use 6. Mrs. Katherine Childress, Superintendent.

Alphonso Isom Sanatorium. Dumas. Established 1913. Dr. Alphonse Isom, Physician in Charge.

El Dorado General Hospital. El Dorado. Established in 1921. 30 beds. Average number of beds in use 20. Mrs. Della Walters, Superintendent.

Sparks Memorial Hospital. Fort Smith. Established in 1889. 100 beds for whites. 12 for colored. Average number of beds in use 50. Cora B. Holy, Superintendent.

St. Edwards Mercy Hospital. Fort Smith. Established in 1905. 75 beds. Average number of beds in use 25. Sister Mary Agnes, Superintendent.

St. John's Hospital. Fort Smith. Established in 1910. 53 beds. Average number of beds in use 26. Eva Atwood, Superintendent; Dr. Chas. S. Holt, Chief of Staff.

Heber Sanatorium. Heber Springs. Established in 1911. 20 beds.

ARKANSAS



● Hospital for community use.
 + Tuberculosis Hospital.

▲ Nervous and Mental Hospital.
 ○ Established since 1920.

Total hospitals in Arkansas, 70; for community use, 52; population per hospital bed, 696; percentage of beds occupied, 51; percentage of counties without hospitals, 62.6.

Warner-Brown Hospital. El Dorado. Established in 1920. 85 beds. Average number of beds occupied 56. Vera B. Floyd, Superintendent.

Huntington Hospital. Eureka Springs. Established in 1916. 10 beds. Average number of beds in use 4. Dr. R. H. Huntington, Superintendent.

Fayetteville City Hospital. Fayetteville. Established in 1912. 50 beds. Average number of beds in use 30. Miss Ruth Riley, Superintendent.

Sebastian County Hospital. Fort Smith. Established in 1902. 75 beds. Average number of beds in use 75. H. A. Durden, Superintendent.

Harrison Harvey Hospital. Harrison. Established in 1924. 12 beds. Aline Harvey, Superintendent.

Helena Hospital. Helena. Established in 1909. 35 beds. Average number of beds in use 18. Kate L. Lord, Superintendent.

Josephine Hospital. Hope. Established in 1915. 20 beds. Average number of beds in use 5. Dr. G. E. Cannon, Surgeon in Charge.

The Julia Chester Hospital. Hope. Established in 1925. 12 beds. Average number of beds in use 6. Dr. Luther M. Lile, Medical Director.

Florence Crittenton Home. Hot Springs National Park. Established in 1905. Maternity. 12 beds. Mrs. M. E. Walker, Superintendent

Leo. N. Levi Memorial Hospital. Hot Springs National Park. Established in 1914. 60 beds. Average number of beds in use 40. Miss Regina H. Kaplan, Superintendent.

Modern Hospital. Hot Springs National Park. Established in 1913. 20 beds. Average number of beds in use 10. Mrs. Fannie Bolind, Superintendent.

New Park Sanatorium. Hot Springs National Park. Established in 1921. 16 beds. Average number of beds in use 8. Mrs. Helen Knight and Miss Leah Sanford, Superintendents.

Ozark Sanatorium. Hot Springs National Park. Established in 1899. 60 beds. Average number of beds in use 35. W. V. Laws, M. D., Medical Director.

St. Joseph's Infirmary. Hot Springs National Park. Established in 1888. 88 beds. Average number of beds in use 58. Sister Bernard, Superintendent.

Woodmen of Union Hospital. Hot Springs National Park. Established in 1923. 50 beds. Dr. John E. Eve, Medical Director. Dr. Ellis Kendall, Medical Superintendent.

St. Bernard's Hospital. Jonesboro. Established in 1900. 102 beds. Average number of beds in use 38. Mother M. Walburga, Superintendent.

Lake Village Infirmary. Lake Village. Established in 1909. Maternity. 25 beds. Dr. E. P. McGehee, Medical Superintendent.

Baptist State Hospital. Little Rock. Established in 1920. 325 beds. Average number of beds in use 90. J. P. Runyan, M. D., Medical Superintendent.

Bush Memorial Hospital. Little Rock. Established in 1918. 48 beds. Colored. Dr. J. M. Robinson, Medical Superintendent.

Florence Crittenton Home. Little Rock. Established in 1903. Maternity. 45 beds. 8 hospital beds. Mrs. L. A. Vandiver, Superintendent.

Great Southern Fraternal Hospital. Little Rock. 40 beds. Dr. Fred T. Jones, Medical Director.

E. S. Hilliard Free Children's Hospital. Little Rock. Established in 1912. 60 beds. O. P. Christian, State Superintendent.

Little Rock General Hospital. Little Rock. Established in 1889. Municipal; general; 150 beds. Dr. Milton Vaughan, Superintendent.

Methodist Orphanage. Little Rock. Established in 1902. 34 beds. 7 hospital beds. Rev. James Thomas, Superintendent.

Royal Circle of Friends' Hospital. (Colored). Little Rock. Established in 1921. 50 beds. Average number of beds in use 12. Dr. C. M. Auter, Medical Superintendent.

St. Vincent's Infirmary. Little Rock. Established in 1888. 135 beds. Average number of beds in use 95. Sister Michaella, Superintendent.

Trinity Hospital. Little Rock. Established in 1924. 44 beds. Average number of beds in use 18. Drs. Orange K. Judd and Robert B. Moore, Physicians and Owners.

United Friends' Hospital. Little Rock. (Colored). 25 beds. Average number of beds in use 15. Dr. G. W. S. Ish, Medical Director.

G. F. McLeod Hospital. Magnolia. Established in 1923. 8 beds. G. F. McLeod, Physician and Owner.

Arkansas Baptist Orphan's Home. Monticello. Established in 1895. 100 beds. 4 hospital beds. C. R. Pugh, Superintendent.

Elton-Matthews Sanatorium. Newport. Established in 1921. Surgical. 12 beds. Average number of beds in use 5. Miss Mary Swope, Superintendent.

Dickson Memorial Hospital. Paragould. Established in 1905. 22 beds. Average number of beds in use 13. Mrs. Sarah M. Dickson-Ramsey, Superintendent.

Paris Hospital. Paris. Established in 1910. 35 beds. Average number of beds in use 13. Drs. J. J. and A. M. Smith, Medical Superintendents.

Davis Baptist Hospital. Pine Bluff. Established in 1920. 55 beds. Average number of beds in use 24. Coral M. Page, Superintendent.

Cora Donnell Hospital. Prescott. Established in 1913. 30 beds. Average number of beds in use 21. Dr. Albert S. Buchanan, Medical Superintendent.

Home Hospital. Rogers. Established in 1923. 6 beds. Mrs. C. W. Boyer, superintendent and owner.

Dr. Love's Sanatorium. Rogers. Established in 1909. 10 beds. George M. Love, Physician in Charge.

City Hospital. Russellville. Established in 1924. 12 beds. Average number of beds in use 3. Drs. Arthur C. Haney and Henry S. Drummond, Physicians and Owners.

St. Mary's Hospital. Russellville. Established in 1919. 35 beds. Average number of beds in use 18. Dr. R. L. Smith, Medical Director. Ellen Phillips, Superintendent.

City Hospital. Siloam Springs. Established in 1916. 12 beds. Average number of beds in use 4. Ruth Johnson, Superintendent.

Quiet Rest Hospital. John E. Brown College. Siloam Springs. Established in 1924. 16 beds. Mamie Davis, Superintendent.

Siloam Springs Hospital. Established in 1913. 12 beds. Average number of beds in use 12. Miss Frances Cowley, in charge.

Michael Meagher Memorial Hospital. Texarkana. Established in 1916. 75 beds. Average number of beds in use 45. Sister Mary Monica, Superintendent.

St. Louis Southwestern Hospital. Texarkana. Established in 1887. 152 beds. Average number of beds in use 52. Miss K. Mayfield, Superintendent.

Chairman Lemons: That takes us to New Business. Are there any resolutions or motions?

Dr. L. Kirby: Sometimes we go into things unprepared.

We have lived to see the United States get into two or three wars unprepared. One of

the biggest things we ever got into was the civil war. Some of you are not old enough to remember. They went to war unprepared. It seems that is the way with the doctors. On this occasion I wrote out a resolution, but it wasn't well prepared. I should have done it before hand. In our county there is a man that practices medicine and goes out and sees a patient and finds out he has got a little bit of money, and says, "Well, you are in a serious condition. I haven't the medicine with me now, but I will make some serum that I will use on you tomorrow and it will cost \$30.00 a dose," and yet the people are exploited by that thing, and the medical profession are guilty. I am one of those who are guilty and who stand by and let that thing go on. There is just as much sense in giving a license to a locomotive engineer by legislation as there is to give a license to a man to practice medicine by legislation. I think we should try to do something in every county toward selecting men who have a higher conception of what the practice of medicine is and what human life and human health is.

WHEREAS, There is a manifest disposition, legislative and otherwise, to lower the standard of medical education, and

WHEREAS, The most outstanding guides for standard in any profession are the schools of instruction in that particular profession, and

WHEREAS, The University of Arkansas, School of Medicine, located at Little Rock, is well equipped in apparatus, clinical material and teaching force, to educate students in accord with proper medical standards;

THEREFORE, BE IT RESOLVED, That this society hereby endorses and recommends the School of Medicine of the Arkansas University as worthy of the support of the people as well as the profession of our State.

Respectfully submitted,

Leonidas Kirby.

Dr. Wood: I ask that this resolution be referred to the Committee on Legislation. I think that matter should be brought more fully before the general Session of the society after the legislative committee has had it in charge.

Dr. Southard: I want to say that I endorse Dr. Kirby's resolution. I think it is what we should adopt. With reference to his preliminary remarks about the licensing by the Legislature of men to practice medicine who are not doctors. I don't think we have anything to fear from them as long as the present governor is in office. (Applause).

Dr. Bathurst: In seconding it, I would like to state that every bill that was passed in the

last Legislature to license physicians not graduates was vetoed by Gov. Terral, and such procedure will continue as long as he is in office. Adopted.

Dr. Moulton: I would like to introduce the following resolution:

"RESOLVED, That the President be authorized to appoint a committee, one of whom shall be Dr. Jas. H. Lenow, to devise a suitable marker for the spot in Little Rock where the first human anatomical dissection was made in this State, and that the Council be requested to make an appropriation from the treasury of sufficient funds to carry out the purpose of the resolution."

The reason for introducing that resolution in this form is, first, that facts of historical importance are well worth commemorating, and we all take a little pride in monuments of any kind to commemorate important facts. My reason for naming Dr. Lenow as one of the committee is that Dr. Lenow was present when that first dissection was made in this State and he knows where the place is. It is in the city park somewhere in Little Rock. He will assist the committee in locating the spot.

Chairman Lemons: As this resolution carries an appropriation, it will have to be referred to the Council.

REPORT OF DELEGATES TO THE A. M. A. To the House of Delegates of the Arkansas Medical Society:

Gentlemen:

At the Dallas Session held last month the membership was reported at 91,792. There is no other association which contains anything like the number of members of the A. M. A. To give an idea of the magnitude of the business side of their Journal, in 1925, the total number of copies printed was over four millions. The receipts from the sale of advertising space for the year exceeds \$650,000.00.

HYGEIA reported as slowly but steadily gaining favor. The circulation in Arkansas is 478. The total circulation exceeds 40,000.

Practically all the larger producers of pharmaceuticals now find it desirable to recognize the work of the Council on Pharmacy and Chemistry.

It was reported that there is a steady growth of interest in Periodic Health Examinations. Twelve State Medical Associations, including Arkansas, have purchased the Manual of Suggestions for Health Examinations to present one copy to each of their members.

In the report made by the Council on Medical Education and Hospitals, it was their opinion that no hospital can be approved which admits to its staff a so-called "drugless" practitioner.

The Judicial Council expressed again its firm conviction that the benefits of scientific medicine cannot be adequately delivered to the individual through the medium of a third party, and that the communication of results of physical examination and the general advice with which it should be associated should go directly from the individual physician to his patient. As was stated in a previous report, the relation between the patient and the physician is an individual matter,

and anything that disturbs this relationship is detrimental to the best interests of the patient.

As to the so-called Hospital Associations, whose purpose being to secure a reduction in the cost of medical, surgical and hospital service to their members, and so far as such organizations may be actuated by motives designed to reduce the cost of medical service to themselves below a sum at which adequate service can be rendered by competent physicians, they are, of course, based on misconception and will bring about results disastrous to their own members. The Principles of Medical Ethics of the A. M. A. specifically condemn the solicitation of patients, whether by individual physicians, by groups, by institutions, or by organizations of physicians. The Judicial Council is of the opinion, therefore, that, so far as these hospital associations are organized for the purpose of soliciting patients they are distinctly unethical.

Several resolutions were introduced pertaining to contract practice, and on motion were referred to the Board of Trustees.

Time does not permit a more elaborate report dealing with all the departments of the A. M. A., including the scientific session, but proud you may be that you belong to the greatest medical association in the world.

Respectfully,
Wm. R. Bathurst.

President: This report will be referred to the Reference Committee.

President: At this time I will call for the Committee on Workmen's Compensation.

REPORT OF THE COMMITTEE ON WORKMAN'S COMPENSATION

To the President and House of Delegates, Arkansas Medical Society:

Gentlemen:

Your committee, heretofore appointed, to investigate and report with recommendation upon the subject of a Workmen's Compensation Law, beg to report; that we have made a careful investigation and study of Compensation Laws of other States, together with the results of same, and find as follows:

1. That the trade or labor unions in the different States where a Workmen's Compensation Law is in effect, are not only fully satisfied with the principle involved, but heartily endorse same.

2. That a proper workable Compensation Law, in our opinion, as a result of our investigation, will bring about a better understanding and relationship between the employer and employee.

3. A Compensation Law automatically removes the expense to the injured laborer of court costs, attorneys' fees, and delays incident thereto, and in addition thereto leaves his relationship to his employer unimpaired.

4. The effect of a Workmen's Compensation Law is to establish a fixed sum to be paid to injured employees, based always upon the nature and extent of the injury, and is paid to him, including hospital expenses, medical attention, etc., without delay, and over such a period, and in such amounts as to take care of his necessary living expenses, based upon his earning capacity, during the period of disability, the payment of all of which is guaranteed to the employee by casualty insurance, thereby insuring to the injured his compensation without reference to the solvency

of the employer, thus taking the principle involved in a proper workable compensation law, it inures to the benefit of the laborer and to the employer, and adds to the tranquillity and harmony of the industrial conditions to which it applies.

5. The costs or expenses incident to casualty insurance for the protection of the employee is always borne by the industry without expense to the employee.

For these reasons your committee feels justified in recommending to you the endorsement of such a law for the State of Arkansas.

Respectfully submitted,

Chas. S. Holt,
Chairman, Compensation Committee.

The selection of the Nominating Committee being in order, the following were selected:

PERSONNEL OF NOMINATING COMMITTEE

First Councilor District—Ira W. Ellis of Monette.

Second Councilor District—A. L. Best of Newport.

Third Councilor District—E. D. McKnight of Brinkley.

Fourth Councilor District—J. M. Lemons of Pine Bluff.

Fifth Councilor District—S. D. McGill of Camden.

Sixth Councilor District—J. S. Chastain of Prescott.

Seventh Councilor District—C. Prickett of Malvern.

Eighth Councilor District—M. E. McCaskill of Little Rock.

Ninth Councilor District—J. G. Gladden of Western Grove.

Tenth Councilor District—E. F. Ellis of Fayetteville.

(There being no delegate or alternate present from the 4th Councilor District, Dr. Lemons was selected by the House of Delegates.)

Dr. Lemons: If somebody comes in later, I would like to let him take my place.

President Wood: I am sorry but this is final.

Dr. Thibault: It is customary to elect these members of the Nominating Committee by motion after they are suggested. I move that the nominations that have been made by the various districts be elected to the Nominating Committee.

Carried.

Dr. Southard: The title of the man to be selected at the head of the ticket is President-Elect.

President Wood: Yes.

On motion, the House of Delegates adjourned.

HOUSE OF DELEGATES

THIRD DAY

Thursday, May 20, 1926.

The House of Delegates was called to order by the President, Dr. Wood, at 1:30 o'clock, p. m.

Dr. Cothorn: Where the delegate and the alternate have both gone, if there is any member from that county present, I move that he be seated as a delegate.

Carried.

Secretary Bathurst: We have a quorum present.

REPORT OF NOMINATING COMMITTEE

We, your nominating committee, beg leave to present the following names for your consideration:

For President-Elect.

Henry Thibault, Scott.
D. A. Rhinehart, Little Rock.
R. H. T. Mann, Texarkana.

For First Vice-President.

Grayson E. Tarkington, Hot Springs.

For Second Vice-President.

Thos. F. Kittrell, Texarkana.

For Third Vice-President.

J. H. Fowler, Harrison.

For Secretary.

Wm. R. Bathurst, Little Rock.

For Treasurer.

R. J. Calcote, Little Rock.

For Delegate to A. M. A.

H. D. Wood, Fayetteville.

For Alternate.

Thad Cothorn, Jonesboro.

For Councilors.

Second District—J. L. Jones, Searcy.
Fourth District—W. T. Lowe, Pine Bluff.
Sixth District—B. C. Middleton, Texarkana.
Eighth District—Anderson Watkins, Little Rock.
Tenth District—Thomas Douglass, Ozark.

President Wood: I will appoint young Dr. Moulton and Dr. Proctor tellers.

Thereupon the House of Delegates proceeded to ballot upon the three names selected by the Nominating Committee, Henry Thibault, D. A. Rhinehart and R. H. T. Mann.

On the first ballot, Dr. Thibault received a majority of all votes cast.

Dr. Mann: I move that Dr. Thibault be unanimously elected as President.

Carried.

Dr. Thibault: Mr. President, this Society is fifty years old and one year over, and it starts a new century by making an awful mistake.

I believe in another fifty years it ought to be able to overcome that mistake. (Laughter.)

Dr. Kirby: I move that we suspend the rules and the secretary be authorized to cast the vote of the House for these other officers mentioned. Carried.

Secretary Bathurst: I take great pleasure in casting the vote of the House for the various officers mentioned by the committee.

REPORT OF THE REFERENCE COMMITTEE

Mr. President and Members of the House of Delegates:

We, your Reference Committee, beg leave to report as follows:

The high standards of professional honor and fearless conduct commended in your President's address are heartily endorsed by your reference committee, and it is hoped that every member who has heard, or who reads, this address will try to foster in himself and encourage in his professional associates those nobler aims so simply and forcefully expressed.

Health and Public Instruction: Inasmuch as the only legal control of midwives is embraced in this sentence: "Provided that nothing in this act shall apply to the so-called midwives," some effort at legal control should be made. It is suggested that a seventh article should be added to the pledge as follows:

"Should I violate the foregoing articles of this contract, I agree to abandon the practice of midwifery in Arkansas until such time as the State Board of Health shall designate for the renewal of my pledge."

Such an addition will make the pledge a legal contract, and will provide a means for the suspension of the practice of those who prove refractory to the regulations.

Hospitals: Your Committee on Hospitals is commended for their detailed and impartial report on the hospital facilities of the State.

Student Loan Fund: The report of your Committee on the Student Loan Fund is unreservedly commended. It is probably true that the rules of conduct and the suggestions toward honorable living and practice that go with these will prove of greater value to these students than the actual money advanced.

In view of the fact that early impressions are most lasting, and that the medical profession is a noble profession only so far as its individual members exhibit true nobility of character, your reference committee is going to suggest that this society select or appoint one or more members each year to deliver a total of not less than three lectures each scholastic year to the entire student body of the Medical School. These lectures to be solely on subjects relating to medical ethics and what is considered as honorable conduct in a physician. That these lecturers appear as representatives of this Society, and that the Secretary shall make arrangements with the Dean and Faculty of the Medical School as to the time and place that these lectures shall be delivered.

Respectfully submitted,
Henry Thibault, Acting Chairman.
M. E. McCaskill.
St. Cloud Cooper.

Dr. Cothorn: I move that the committee's report be accepted. Carried.

REPORT OF THE COUNCIL

Dr. Cothorn: Part of our report was made the morning of the first session and data has been accumulated during the present session to make a complete report. In taking up the State by districts, we wish to report that the first district has now a registration of 130, last year 133. This district has lost three members, one dying and two moving away. This is my district.

The second district this year has 68, and last year 65, which shows Dr. Jones is doing good work. The third district has a membership of 140 as against 127 last year. Dr. John of Stuttgart, is the councilor for that district. The fourth district has a membership of 95 against 92 last year. Dr. Smith of McGehee, is councilor. The fifth district has 84 against 75 last year. Dr. Cooksey is the councilor. The sixth district has 75 this year against 79 last year. Dr. Middleton of Texarkana is councilor. The seventh district has 128 this year as against 126 last year. Dr. Gann of Benton is councilor, and Hot Springs is in that district. The eighth district has 203 against 233 last year. Dr. Henderson of Conway is the councilor, and Little Rock and Pulaski County happen to be in that district. The ninth district holds it own; 47 last year and 47 this year. Dr. Kirby, our worthy member of Harrison is councilor. The tenth district has 141 this year against 151 last year. Dr. Ellis of Fayetteville is councilor.

Now, in getting up this Council report we wrote to the Secretary of many of the county societies and we asked them three questions: Are you meeting regularly and what is your average attendance? Are your meetings interesting and profitable to those who attend? Is your membership working together in harmony? I have selected a letter received from the Secretary of the Randolph County Medical Society, which is a fair sample of the answers received:

"We have a membership of 16. Our average attendance is 9. We meet regularly and our meetings have all been interesting and profitable. Our membership is working in harmony, or as nearly so as it has ever been since I have been a member," and he has been a member for a long time.

I am glad to see the spirit of co-operation is getting a little better in most of our county societies.

At the daily session of the Council routine business was taken up. An amount not to exceed \$200.00 was set aside for the purpose of placing a marker at the spot where was done the first legalized dissection in Arkansas. I might add that, since this resolution was introduced by Dr. Kirby, we have learned that Arkansas was the second State in the Union to legalize dissections.

The secretary was voted his usual honorarium and the necessary incidentals to defray the expenses of this meeting.

The Auditing Committee, composed of Drs. Middleton, Smith and Cooksey, went over the books and reports of the secretary and treasurer and found them to be in good shape and the financial phase of our Society not in affluence but in a fair condition. This committee compliments these officers for their untiring efforts in looking after the financial interests of our society.

Now, as a mark of appreciation for the courtesies extended to us by the Rev. Hickok and the choir and membership of the First Presbyterian Church to make our stay here pleasant and enjoyable, the sum of \$100.00 was set aside for the pastor's use as he sees fit to apply it.

The Council thought best to omit from the roster of deceased members those who were more than a year in arrears for their dues at the time of their death. Should the County Society, to which they belonged, wish, they may send their dues to the secretary before the proceedings of our annual meeting are published.

The Council wishes to suggest to the different councilor districts or to the County Societies or maybe a group of Societies to try to do through the off season of the year; that is, through the non-scholastic season of the year, a little post-graduate work. Through the Extension Department of the Universities, we can get teachers from St. Louis, From Memphis and perhaps from Arkansas, that would be only too glad to come and spend a day or two with any district or group of Societies or group of counties or with any single county, that would get enough men together to be interested in whatever subject they might wish to take up. Some of the districts have been doing that, and we wish to urge all parts of the State to do the same.

The Council wishes to stress the importance of action on the part of the legislative committee to get its decks cleared for action and its organization primed before and not after the meeting of the coming General Assembly. We wish to say that sufficient funds are behind this committee to secure the necessary legal talent and to carry on a propaganda of information that might be deemed suitable and best.

The Council suggests that it be empowered to recommend one or two outstanding men at each session of our State Society who have reached a suitable age and who have been outstanding and marked by their activities in behalf of our association and organized medicine, that these men be recommended to the Board of Trustees of the Medical Department of the University of Arkansas for an honorary degree. At this time we have two such men and they are both present, and I think everybody will realize that they are entitled to all honor that can be handed to them. They are Dr. H. D. Wood and Dr. Leonidas Kirby. (Applause).

We thank you.

Dr. Mann: I move adoption of the report of the Council. Carried.

President Wood: Before we proceed any further I want to name the committee that shall put a marker at the place where the first legalized dissection was made in the State of Arkansas. It was intensely interesting to me to hear the account of that and how our capable friend, Dr. Lenow, took the body of an inmate that had died in the penitentiary and took it in his buggy and carried it to this place where that dissection was made. Gentlemen, I think there ought to be a very suitable marker put where that was done, because Arkansas was the second State to legalize dissection. Pennsylvania, I think, led the way. I shall name on that committee Dr. H. Moulton, Dr. Robert Caldwell, Dr. J. P. Runyan, and Dr. J. H. Lenow, as chairman.

Dr. Cothorn: Here is a resolution that we wish to introduce and make comments afterward:

"RESOLVED, That the so-called graduates from the Kansas City diploma mill, known as the Kansas City College of Medicine and Surgery, or graduates from any of these other diploma mills, be declared not eligible for membership in the county societies of the State of Arkansas."

Now, some of our societies are having a little trouble in that some of these men are being tried to be railroaded into the society for membership. And this would relieve them of some of their embarrassment.

Dr. Bathurst: I move the adoption of the resolution. Remember this is a strictly a county society problem. The county societies must settle for themselves the qualifications entitling candidates to membership, and things of this kind should not come before the State Society.

Dr. Cothorn: It is not proper for the State Society to act upon that?

Dr. Bathurst: I don't think so.

Dr. Kirby: They can make the recommendation.

Dr. Bathurst: There are a few desirable physicians in this State who graduated from eclectic schools, and if it meets with the approval of the local societies to take them in, why should the State Society object. We take in ethical under-graduates, for that matter. If the applicant is of good character, a good man, a good doctor, I say take him in, I don't care where he comes from. The Kansas City diploma mill is now out of existence. In the final analysis it's all in the man, no matter where he comes from.

Dr. Mann: I want to introduce a resolution before this society at this time, if I can get a second to it.

RESOLVED, That we, as members of the Arkansas Medical Society here assembled, believe fully in the great importance of post-graduate work.

NOW, THEREFORE, BE IT RESOLVED, That this Society undertake to conduct a special post-graduate course of three days' duration immediately before or after our general meeting next year, in order that the best talent in America may be procured to conduct such a course, that the sum of not exceeding \$1,000 be set aside to defray the expenses of such a course, and that a special program committee consisting of five members be appointed by the president to arrange such a program and to do the other necessary things to make this course a success.

Now, to the point. One society is carrying on a program just as outlined in this resolution, except the members of that society tak-

ing this course pay a fee of \$10 for the post-graduate work. I think if this is adopted by this society, for the first year it wouldn't be wise to have any fee for this post-graduate work, but, after the course is established, should it succeed, then a fee could be charged sufficient to pay the expenses of this course. I believe that, if such a step is taken by this society, the best men in America, such as Barker on internal medicine, and men of that character, can be brought to Arkansas for three days, which will give our men the practical things which we need in this line of work. I think it will do more to stimulate the attendance and interest in our society than anything else that can be done. And if this society can do anything to make better doctors than it is doing now, if it can do anything to better conserve the health of the two million people living within this State, it certainly is falling short of its duty until that thing has been done. Dr. Morgan Smith has heartily endorsed this plan. Dr. Caldwell can not be here. He told me, if it couldn't be put over in any other way, that he would personally give \$100 for its support, since he is pretty familiar with the work in the Academy.

Dr. Weaver: I will second the motion.

Dr. Henderson: I want to suggest that this matter be referred to a committee to be reported at our next annual meeting. Let this committee investigate it and find out the particulars and know more definitely how this can be done. I move a committee of three be appointed by the chair to have this matter in charge during the next year.

Dr. Thibault: As a matter of order, the resolution carries an appropriation and automatically it is referred to the Council for action.

Dr. Mann: I withdrew the money part of it. I want to state further, in presenting this resolution, that I believe we can get the best men in America to come down here and stay with us three days, and in the societies in which I am connected, in which that is done, it has worked out very well. I believe it will be more beneficial to our Society.

On a standing vote, the motion was lost.

On motion, the House of Delegates adjourned, *sine die*.

GENERAL SESSION

FIRST DAY

The General Session was called to order at 1:30 p. m., Tuesday, May 18, 1926, by Dr. Wood, President.

Invocation by Rev. A. S. Harnwell.

Our Father in Heaven, we are grateful to Thee always for every good gift. All good and perfect gifts come from Thee. We thank Thee for health and for science that keeps us well. We thank Thee for men who study that they may be of use to mankind. We pray Thy benediction upon them as they meet here from session to session. May the Spirit of God lead them in all their deliberations. May they see in and through all things that they do see the mighty hand of God; that he is the Maker, the Creator of all things that are worth while. Forgive us our every sin, we pray, and use us, and each of us, in our own sphere, to the advancement of the Kingdom of Christ, for we ask it in His name and for His sake. Amen.

President Wood: We will now have the address of welcome for Hot Springs by the Rev. C. E. Hickok, Pastor of the First Presbyterian Church.

ADDRESS OF WELCOME

Rev. Hickok: I congratulate the record that the president of the association has made in pure medicine. I haven't enjoyed very many distinctions in life, but there is one distinction I have this afternoon. I am not a doctor. I am a plain, every-day preacher. This is an opportunity I long have sought. It is quite an unusual experience for a minister to look into the faces of so many physicians at one time. I have some fifteen or twenty of them, members of my church, in good standing, all of them, and I look over my congregation Sunday after Sunday and very seldom am I able to preach to a single physician. However, that goes without further remarks.

We are very glad to have you gentlemen with us this afternoon to begin your convention. You know there are many things that are in common between Hot Springs and the medical profession. There was a time when you gentlemen looked upon Hot Springs with more or less suspicion. I feel, in welcoming you to this city this afternoon, there can be brought to your attention at least a few things that will remove any suspicion that may lurk in your minds. There was a time when Hot Springs was boosted by some folks who lived here as being something of a cure-all; that all a man had to do was to come to Hot Springs and jump into the waters and wash away all the ills to which the flesh is heir. Gentlemen, in welcoming you to Hot Springs this afternoon, I want to assure you that that spirit is not only on the decline, but that it has been banished. No longer do the enlightened citizens of Hot Springs claim or feel that the virtue and merit that are in the waters of Hot Springs are in any way a cure for all ills. Rather, we have come to that conclusion wherein we say that we have here a valuable and invaluable adjunct to the work of the physician. In other words, what we do here is supplementary to what you gentlemen can do with all of your skill.

Again, we have something of the difficulties that you gentlemen face continually in the practice of your profession. I don't read the reports

of any convention that I don't find something about what we call fee-splitting. It must be an ugly word among the medical profession, the splitting of fees. And every convention report that I have ever read I find in it that somebody has something to say on the law about it, and about fee-splitting. Well, we passed through something of the same sort in Hot Springs. There was a time here when some of our practitioners had runners out to bring patients to them. You gentlemen would send a patient here recommending him to a certain doctor and, after you gave him the letter, you just kind of felt, "Well, if the Lord is good to that man, that letter will be delivered to the man to whom it is addressed," and you who are older have had that experience, and you had the impression that the drumming evil in Hot Springs was injurious to the profession.

In welcoming you to our city today, I want to assure you that it is due entirely to the physicians of the Garland County-Hot Springs Medical Society, that the drumming evil has been abated.

We have had our fight in common with you; you against splitting fees and we against what we call the drumming evil.

It seems to me like there is another ground upon which we have met and co-operated and made the fight together; that is, advertising. I know it is just like shaking a red flag in an ethical physician's face to talk about advertising. For one, I want to plead guilty to the charge that in days past Hot Springs was unethical in its advertising. I have seen some of the advertisements, little slips of paper and things of that kind; just like reading the patent medicine almanacs or like reading I don't know what, these advertisements that were flooding the mails and promising great things, and not entirely ethical; they were not true.

I want to assure you gentlemen, in welcoming you here that we have made the fight, and that today Hot Springs is trying to vie with the medical profession in its high standard of ethics. Then of course, we have another common ground. Please don't smile. I am not a physician, I am not a scientifically trained man and my mind is not scientific at all and so on, so please don't smile. You know, in spite of all that's said and done, we believe that there is something in the waters of Hot Springs that is well worth while. We believe it, Why? Well, I know you gentlemen won't admit the value of this. Because we have seen some of the things that have been done through these hot springs as an adjunct. We believe there is virtue in these waters and this because of certain clinical results, my doctor friends call it. In a limited way we believe in the virtue, of the hot springs and personally I believe in the virtues of the hot springs for 75 or 100 high-type physicians—and you won't find their superiors anywhere in the entire country—say, there is something here we can use for the benefit of humanity. Now, not the waters alone, but the waters plus the intelligence and skill of the trained physician. So, in welcoming you this afternoon to Hot Springs, I feel that we are reaching out our hands to those who are our friends, friends because we seek the same thing. We are trying to promote the well-being of humanity. We are trying to do all that is possible in preventing sickness and curing that which is curable. You and we Hot Springs folks have stood upon the same battle field and we have made the same fight, you in your place and we in ours, against the evils of advertising, against the evils of fee-splitting, and against kindred evils. We don't claim everything for our hot waters. No. But we do claim that, as an adjunct to the intelligent treatment of the ailments and infirmi-

ties of humanity, these hot waters are well worth while.

Gentlemen, they are yours; the city is yours; and even, if it be but an humble and untrained layman who is talking to you, I just want you to know that Hot Springs does not consider anything too good for its best friends, the physicians of the State of Arkansas. (Applause).

President Wood: We will now hear the address of welcome for the profession by Dr. E. A. Purdum.

ADDRESS OF WELCOME FOR THE PROFESSION

Dr. Purdum: Mr. Chairman, Ladies and Gentlemen: Dr. Hickok has very well welcomed you, and told you about the main things of interest in Hot Springs. It only remains for me to say, as one of your members expressed it a few years ago at Little Rock, that whenever you return to Little Rock to attend a medical meeting they feel very much like you were coming back home, and that was one reason that they liked to go there for their meetings. Now, in returning to Hot Springs, we feel like you have been here often enough to begin to have somewhat that same spirit toward Hot Springs. And on behalf of the Garland County-Hot Springs Medical Society, I wish to again welcome you and state that we want to welcome you just as often in the future as we have in the last ten years, and we want you to feel that you are returning home just as much as you would if you went back to Little Rock for the meeting. And remember also that our facilities for taking care of your meetings, our opportunities for entertaining you, and we hope our ability to make you enjoy yourselves in every way increases from time to time. So, I bid you welcome, and invite you back as often as you feel like you can come, without making the rest of the State envious. (Applause).

President Wood: We will hear the response to the addresses of welcome by Dr. G. G. Altman of Helena.

RESPONSE TO THE ADDRESSES OF WELCOME ON BEHALF OF THE ARKANSAS MEDICAL SOCIETY

Dr. Altman: Mr. Chairman, Ladies and Gentlemen: It is very delightful to come up here on an occasion like this, after ministers and doctors and laymen, young men and old men, have told us how glad they are to have us come here. I believe there is something of virtue in these waters. I believe the doctor is the real reason for that belief. What I want to say at the outset is that I am very delighted, really, to come here on this occasion, as a representative of the Arkansas Medical Society, to say to the physicians and to the people of Hot Springs in a few words our appreciation for their kindness, their generosity and all the things they have done and are going to do for us on this and future occasions.

And, right here I ought to state that the right way to deliver an answer to the addresses of welcome is to make it brief and snappy. I never was much of a fellow to follow the other fellow's lead. You don't get very far in life that way. But, at the risk of being called a bore and not knowing when to quit, I am going to say just a few words more. I shall take just a moment or two.

I was just thinking this afternoon in anticipation of that treat we are going to get. I was just thinking of how many of these doctors are real natives and how many were brought here, how many like myself came because they wanted to and couldn't help themselves. It is not nice to talk personally and I will not do that, but I will tell you a little story about myself that is really interesting. I went to school in the East and met a most beautiful girl there, and fortunately I came to Arkansas to visit her once, and now I am here permanently! She is a most lovely girl. She's a charming girl. She is my wife! Of course, all these men that were not born in Arkansas came for the same reason, because they couldn't withstand the allurements of a land that produced such bewitching attractions. It is for this sort of men—not natives who just came here accidentally on purpose that I feel sympathetic at this time.

I might say a word in response to the Hot Springs-Garland County Medical Society, to the citizens of Hot Springs and to the people here generally, and that is this: I am sure that before I came to Arkansas I never heard anything about the State. The only thing that impressed itself upon me was that wonderful resort where Ponce de Leon jumped into the waters and came out young again. I know everybody in Baltimore knew of it and heard of it, and all have been down here more or less. And that's all I knew of Arkansas. I have been down here many times since that fatal day when I took unto myself a wife, and I am happy over it. I wouldn't trade with anybody!

I want to say to you frankly, honestly and quite sincerely that I have never regretted either the taking of a wife or the opportunity of coming to Hot Springs. They both have been dandy pals. One has endured a long time and the other is still enduring and I am sure will remain loyal.

I feel really that the doctors of the State owe to Hot Springs a great debt of gratitude, first, as the minister has so ably said, because they have ideals in front of finances. I think that the doctors of Hot Springs today represent a splendid type of individual manhood, as well as splendid qualities of individual physicians. Certain it is that they stand up as medical and surgical leaders in the State of Arkansas and we are proud of them. When I hear of Hot Springs and hear of the quality of work they are doing here, I thank goodness for that grade of men who, put ideals above material things. What Hot Springs is it owes, not to its hot waters, not to its advertising, not to its men and women so much, but to the quality of work of its splendid doctors, who know how to put service above self.

With that in mind, I would say, as a representative of that splendid group of doctors that I am so happy to say a word for today, to the ladies and gentlemen of Hot Springs, the ministers, the business men, the stores, hotels, parks and the doctors, that we do honestly and sincerely appreciate the kind welcome, and we wish to thank you in the only way we can thank you, sincerely, honestly and gratefully, for what you have done, what you are doing and what you will, I know, ever continue to do, in rendering to humanity a greater quality of service. (Applause).

(Second Vice-President McCarroll in the chair).

Chairman McCarroll: We will now have the President's address.

PRESIDENT'S ADDRESS

(Printed on page one, this issue)

Dr. Nettie Klein, fraternal delegate from the State of Texas was here introduced.

Dr. Klein: Mr. President, Ladies and Gentlemen: Twenty years ago I accepted an invitation from Dr. Steve Carrigan, who was president, to read a paper on "Carcinoma of the Uterus," assisted by a very dear friend of mine, Dr. Bandler, of the New York Post-Graduate. I haven't attended the society since, but I have kept in close touch with the work of the society and all that has been done. I have learned of the work that has been so faithfully done in elevating medical ethics and medical science. Today, twenty years later, I am sent as a delegate by Dr. Rossner, President of the State Medical Association of Texas, to bring you greetings from the entire profession of Texas. He wishes me to say that he sends greetings to this great society composed of men of knowledge and attainment in the workings of medical ethics and medical science. He wishes me also to say that Texas stands ever ready to co-operate with you in any undertaking that you see fit to inaugurate having as its goal the elevation of the human family. I thank you for this honor.

President Wood: I want to say that it was a great pleasure to me last summer to be in Dr. Albee's class at the Post-Graduate hospital and watch him work for one-half day. After he was through, I asked him if I could speak to him for a few minutes while he changed his clothes. He said he would be glad to have me come down to the dressing room and he would see me. So I went around and told him that I was a country doctor from Arkansas; but I wanted him to come to Hot Springs and deliver us an address on Potts' Disease of the Spine. I am glad that Dr. Albee is here today, and he will show us some pictures that will illustrate the work that he is doing.

Dr. Fred H. Albee of New York City, delivered an address on "Rehabilitation Surgery," illustrated with motion pictures and slides.

Dr. Anderson Watkins read a paper on "Findings in a Series of Cases of Cholecystitis."

Dr. O. C. Melson of Little Rock, read a paper on "Jaundice."

Dr. F. Walter Carruthers read a paper on "Orthopedic Surgery."

Dr. James E. Jones of Little Rock, read a paper on "Some Causes and Treatment of Constipation in Babies."

Dr. Noble D. McCormack read a paper on "Hypertrophied Thymus."

The following telegram from the Southern Medical Association was received by the Secretary:

Birmingham, Ala., May 18, 1926.

Arkansas Medical Society, in Session, Arlington Hotel, Hot Springs, Arkansas:

Greetings and good wishes. Hope you are having a successful meeting.

Southern Medical Association.

Dr. Kirby: I move that the secretary be authorized to formulate a proper reply to this message from the Southern Medical Society. Carried.

On motion, the General Session adjourned to meet on the last day.

GENERAL SESSION

LAST DAY

The General Session was called to order at the adjourning of the House of Delegates at 2:15 p. m., Thursday, May 20, 1926, by President Wood.

President Wood: I want to present to you, Dr. Lemons, your president for this coming year. (Applause).

Dr. Lemons: I thank you very kindly, gentlemen, for your hearty endorsement, and I hope and trust I may serve you to the very best advantage, and that the coming year may be one of the greatest and most prosperous years in the history of the Arkansas Medical Society.

President Wood: The President-Elect comes before you. (Applause).

Dr. Thibault: It has been my experience that, whenever I was elected to an office in an organization, it had some hard nuts to crack, and I believe that by the time I get to be your President that, with the wide extension of industrial medicine, the undefined border-line between what we call soliciting practice and contract practice, moral and immoral, is going to stir up enough trouble in organized medicine all over the United States to make those men that are occupying positions of trust have a good hard job. I hope the Lord will give me strength to deal with it properly, as some of you older men have been able to do in the past. (Applause).

President Wood: Gentlemen of the Arkansas Medical Society, I want to thank you for the honor that you conferred upon me last May. It came unsought. I would like a copy

of the report of that Reference Committee on the address that I tried to read the first day of this session and was unable to complete. I did much of that when I was only able to sit in a chair with a lap-board in front of me and write much of that address. I feel thankful that that committee paid such a compliment to me for something that was done under difficulties. I wish to thank you for the honor you conferred upon me in making me your delegate to the meeting of the American Medical Association. I don't know of any greater honor that you could have conferred upon me, and I feel deeply grateful, I hope to be at that meeting but, for fear that I am not there, I am getting a little bit old—I shall have passed my four-score birthday before that meeting comes off—I hope that you have a representative who will be there to take charge of things if I fail. I thank you. (Applause).

President Lemons: The next is the selection of the meeting place for 1927. Where shall we go?

Dr. Mann: I want to invite the Society to Texarkana, in behalf of the Miller County Medical Society.

Dr. Rhinehart: On behalf of the Pulaski County Medical Society, the largest society in the State, the Little Rock hospitals and the University of Arkansas School of Medicine, I wish to invite the Society to meet next year in Little Rock.

Dr. Cathey: Mr. President, I wish to invite the Society, in behalf of the Union County Medical Society, to come to Union County next year.

Dr. White: I want to tell the members of the Arkansas Medical Society why they should come to El Dorado for the next meeting. El Dorado is a town that has grown from a population of about three or four thousand in the past five years to a city of 30,000. It is known all over the world, particularly all over the United States, on account of its oil. We can prove it, we have got the goods, when you come down there. We have got one of the biggest oil fields in the country there. Not only that, but at the present time we have three hospitals now in operation and another brick hospital being built. And we feel like we can give you members a good royal entertainment. We have four good hotels there. We believe we have the hospitals to give you some clinical material. We feel that Little Rock has the facilities, but should not have

the meeting again so soon because they had it last year. We shall certainly appreciate having you down there for the next convention.

Dr. Cothorn: I wish everybody to remember that unfinished fish fry we had in Jonesboro some years ago. We want to finish that up in about two years from now. Take notice and govern yourselves accordingly.

Drs. Rush and Proctor were appointed tellers.

On the first ballot, Little Rock was chosen as the meeting place for 1927.

Dr. Kirby: I think we couldn't do any better than to show our appreciation of the courtesies that have been extended to us by the physicians of Hot Springs, the hotels, the railroads, the press, the citizens and the churches of Hot Springs. I wish to extend to them, the thanks of this Society for the same.

Dr. Bathurst: I move the adoption of the resolution. Carried.

On motion, the Arkansas Medical Society adjourned *sine die*.

MEMORIAL SESSION

Wednesday, May 19, 1926.

The Memorial Session was called to order at the First Presbyterian Church by Dr. Frank Vinsonhaler, Chairman of the Committee on Necrology, at 9:00 o'clock, a. m. The church was tastefully and appropriately decorated for the occasion. Each visitor on entrance was presented with a rose.

Exercises were prefaced by an organ solo.

Invocation by Rev. C. E. Hickok, Pastor First Presbyterian Church:

Our Heavenly Father, as we come together in these memorial services this morning, it is to honor those who have gone before us, the lives they have lived, the services they have rendered to humanity. As we come into these services, it is to kindle in our hearts those fires that shall continually glow perpetuating not only their memories but, as far as possible, their work. We thank Thee that, while they minister unto our bodies, Thou hast given to each of us the promise and the hope of life everlasting. We thank Thee that the Lord Jesus Christ, that great Physician, while ministering unto the bodies of men, also ministered unto their souls; that in Him there is promise of immortality. And so this morning, while there is sadness as we think of those friends who have passed on, there is also a joy, an assurance and a comfort because of Christ, His work and the hope that is built upon Him. We pray for the forgiveness of all our sins, in Jesus Christ's name, we ask it. Amen.

Dr. Vinsonhaler: By your presence here you testify to the memory of the comrades who have fallen. More than a third of a century

ago I became a member of the Arkansas Medical Society. The President of the Society at that time was Dr. J. T. Jelks, who lived in this city. Of the gentlemen who were present, a hundred or more at that time, most of them have passed away. It was always a source of honor and pleasure to me that I became a member of the Society during the presidency of Dr. Jelks. He was a splendid Christian gentleman and those who constituted the Society at that time were of that type. While most of them have gone on a long journey, their memory remains to exalt and hallow the Society in the eyes of men. We will now have the memorial address by Dr. Thos. Douglass.

MEMORIAL ADDRESS

THOMAS DOUGLASS, M. D., Ozark

We are here gathered together to honor the memories of those of our fellows who have departed this life during the past year. I think we are inclined to over-much solemnity on these occasions. The final event in a fruitful career is not a calamity, but a natural and normal termination. There is no good reason why we should dread death when we have lived out our normal term of years, or regard it as appalling when it befalls our fellows. It is a reason for mourning when a useful and busy life is cut off prematurely. Why are we inclined to be lugubrious when we remember those who have died? Is it that we are over-much affected by such poems as *The Great Elegy* and *Thanatopsis*, and the traditional view of death? I have wondered why Gray wrote with such deep melancholy. Consider the Epitaph:

"Here rests his head upon the lap of Earth

A youth to fortune and to fame unknown;
Fair Science frowned not on his humble birth
And Melancholy claimed him for her own."

Death is a wonderful part of the great mystery of life, and when we come to fullness of years should we not accept it as a welcome release? Some of those who departed this year, I am sure, felt so. We are not so melancholy when some friend leaves us for a journey to some distant land and we know the improbability of seeing him again in this life, why should we be so mournful when the separation comes at life's end?

Rather let us recount with pleasure the good these, our fellows did while with us and rejoice at their undoubted triumphs over dis-

ease and suffering, and remember gratefully their kindly fellowship and their contributions to scientific medicine. As for the rest we shall not mourn as those who have no hope, although the views of scientific men with regard to the future life have greatly changed and we realize that whatever there is beyond will be quite different from former conceptions and beyond doubt will be no improved duplication of this existence. Yet it is highly probable that life is no more destructible than matter. From whence we came we know not nor whither we are bound. But a few years and we shall join them and for the present we regret our separation from and our loss of their help and comradeship. When our time comes may we have faced the issues of life as courageously as they and with them "Wrap the drapery of our couch about us and lie down to pleasant dreams." "This day," said Seneca, "which thou fearest as thy last, is but the birthday of Eternity."

Rather than to view the close of life with pessimism let us consider the good estate of those of us who have finished their life work and are through with the struggle and care incident to all human life, as well as those particularly heavy burdens which it is the lot of the physician to carry. Let us rejoice with them over their good deeds. Beyond question they have added many years to the sum total of human life in Arkansas. Many now living owe the fact to their professional care. No doubt the State is indebted to them for the lives of gifted citizens or those who would grow into that high estate. How great an amount of anxiety and suffering they have relieved.

We acknowledge with pleasure their services to organized medicine. This medical society is an organization of great usefulness and service to the public and to the profession. Holding high the standards of professional service and medical ideals, as it has always done, they who have labored to uphold it have contributed immense and valuable service. Of these departed ones all have contributed in some measure to the success of this Society. One served in the highest position of honor. All of them attended the meetings more or less regularly and probably all were faithful in their county societies, the place of least conspicuous service and hardest work, and the most important since the success of the medical organization is best measured in the county units.

Nearly all those who died during the year were in active practice; they died in the harness, faithfully continuing their work up to the last. What a record to carry on to the end. It is a high privilege thus to serve. One of our notable members who fought bravely, giving the utmost that was in him was Dr. C. R. Shinault. His was a brilliant career of faithful service to his community and to the profession. He served this society as president with honor. He was seriously handicapped in his latter years by illness, but battled bravely on choosing to struggle against heavy odds rather than to give up. His letter to Dr. Bathurst, written so short a time before his death, reveals him in a pathetic struggle laboring as best he could in spite of his disease. How nobly he fights on and is loath to give up, although he recognizes that he can not do much more. How fine that he should be able to finish his voyage of service and come into port and then make ready for his last great voyage. Through it all his brave spirit excites our warmest sympathies and emotions. "This is a dreary night and a lonely one for me, a sick man," he wrote. To be lonely and sick and on the ocean at night, far away from loved ones and the end near at hand is a somber fate indeed. How glad we are that he could write: "The Captain and all are kind to me." We thank that Captain and his company for their kindly human sympathy for our good friend. In Dr. Shinault we lost a splendid member, a faithful supporter of organized medicine and the State a good and brilliant physician.

Dr. William L. Parchman of Van Buren, who died June 4, 1925, was a good friend and a faithful physician and a pleasant companion. He was one of the old land marks in Van Buren and is missed by many friends.

Dr. H. A. Longino of Magnolia died August 28, 1925. Retiring from active practice in 1922 after a long and successful career he kept up his interest in medicine until the close of his life which came suddenly. He was a very popular physician and possessed a quality unusual in physicians, in that he was a successful financier and made many profitable investments. He enjoyed his professional work and was keenly interested in life. A man of great liberality, he did many good deeds and did not like publicity about them. He lived his religion. He was a good Methodist, a good Mason and a good sportsman. This is saying a good deal for a man.

Dr. T. J. Stout of Brinkley died August 10, 1925. He had a large surgical practice and conducted a hospital. He was popular and well-known. He had many friends in this society who regret his loss. He served as secretary of the State Board of Medical Examiners for several years and always took an active part in the affairs of this Society.

Dr. M. G. Thompson of Pine Bluff died May 14, 1926.

He had practiced for a number of years in Hot Springs, and was well known to the physicians of our State.

Dr. Andrew J. Murchison of Keo died November 19, 1925. He was a graduate of the Louisville School of Medicine. He was a charter member of the Lonoke County Medical Society, a hard worker and a faithful practitioner; very active and popular while his health lasted. He also was handicapped in his latter years by sickness, but continued to work from necessity. Compelled to strive for his daily bread when physically unable there was much of disappointment in his latter years.

Dr. Earl Thomas of Hoxie died October 13, 1925. He was found dead in his automobile on the highway leading to Walnut Ridge.

Dr. John A. Cox of Donaldson died November 28, 1925. He was a member of this County and State Medical Societies. He was also a Mason and a member of the W. O. W. fraternity.

Dr. Chas Pierce Davenport of Hartford died January 1, 1926. Aged 73 years. He was in active practice up to the time of his last illness. He was a graduate of Vanderbilt and of the New York Post-Graduate. He was a Mason and a good Baptist, and a member of the Sebastian County and the State Medical Societies.

Dr. William A. McHenry of Rogers, died Jan. 14, 1926. He was a good member of the church and loyally supported organized medicine. He was good to the poor and served his people well. It was said of him that his memory will be a lasting benediction to those who loved him.

Dr. Needham Harvey Grady of Monette died February 24, 1926. He had not been in active practice for several years on account of disease of the heart and kidneys and had spent the last four years of his life at Hot Springs. He had been a resident of Buffalo Island for more than fifty years.

Dr. Amie Hays of Clarksville died February 24, 1926. She was one of our few women physicians. She had long practiced in Clarksville and had many friends. She was a regular attendant at the Johnson County Medical Society.

Dr. William F. Hornbarger of Heber Springs died February 26, at the age of 66. He taught school for a number of years; came to Heber Springs in 1883 and later graduated in medicine.

On account of the poor health of his wife Dr. Hornbarger had practiced in El Paso, Texas for the last two years, but the climate there not being favorable he returned to Arkansas early in 1926.

Dr. William F. Baugh of Conway died March 4, 1926; aged 51 years. He was educated in the University of Arkansas and was a graduate of the medical department, term of 1884-5, and was a post-graduate of Tulane. He was a member of the Methodist Church and was highly esteemed by all who knew him. He was a faithful member of his County Medical Society.

Dr. Robert G. Davis of Hot Springs died April 9, 1926. He came to Arkansas from Georgia and had practiced in Hot Springs for twenty years. He left many loved ones to mourn his loss.

Dr. Early E. Scott of Fort Smith died April 20 1926. He practiced in Booneville and Mansfield and was sick the last few years of his life with cancer of the stomach. He was a popular physician and had many friends and was highly esteemed by his fellow workers.

Dr. Morgan Fredrick Mount of Hot Springs died May 1, 1926.

Dr. W. L. Newton of Camden died February 26, 1926, of angina pectoris. He was a graduate of the Memphis Hospital Medical College and had practiced in Camden since 1908. The Ouachita County Medical Society says that he was one of the most loyal, fearless, fair and conscientious members, and they feel keenly the loss of his counsel, aid and companionship.

Dr. W. R. Brooksher of Fort Smith, aged 62 died this morning, May 19, he was a good physician and a splendid man, one of the finest in the State. He had practised in Ft. Smith 25 years, coming there from Harrison.

May we emulate the good work of these of our fellow workers who have finished their life work and have gone to their eternal re-

ward. May we avoid as far as we can their errors and profit by their good example.

We shall ever reverence the memories of those who have faithfully served as physicians many years.

Dr. Vinsonhale: This concludes the memorial address of Dr. Douglass, embracing, so far as he has been able to ascertain the names of those who have passed away during the last year. The opportunity will now be offered to any one who desires to make additional remarks concerning any member whose name is shown on our list.

Dr. Southard: I would like to offer a resolution with reference to the death of Dr. Brooksher.

"WHEREAS, We have received news of the death of Dr. W. R. Brooksher of Fort Smith; therefore,

BE IT RESOLVED by the Arkansas Medical Society that we deeply deplore the death of Dr. Brooksher, who has long been an active and able member of this Society;

RESOLVED, That we extend our sincere sympathies to his wife and family in this, their time of great sorrow and bereavement.

"RESOLVED, Further that a copy of this resolution be wired to his wife." Carried.

The Choir rendered Tennyson's "Crossing the Bar," after which the benediction was pronounced by Rev. Hickok.

Absence of occupation is not rest,
A mind quite vacant is a mind distress'd
—William Cowper.

A laugh is worth a hundred groans in any
Market.
—Charles Lamb.

Fate steals along with silent tread,
Found oftenest in what least we dread,
Frowns in the storm with angry brow,
But in the sunshine strikes the blow.
—William Cowper.

Age is a quality of mind.
If you have left your dreams behind
If hope is cold,
If you no longer look ahead
If your ambition's fires are dead
Then you are old.

But if from life you take the best
And if in like you keep the jest—
If love you hold,
No matter how the years go by
No matter how the birthdays fly
You are not old.

—Ex.

Obituary.

HOOVER, ALEY S.—Dr. A. S. Hoover of Stamps died May 31, 1926. Aged 67. He is survived by his wife and two sons.

STINSON, HARRY CLAY—Dr. H. C. Stinson of Dermott died June 15, 1926. Aged 73. Dr. Stinson, at one time, served as Superintendent of the State Hospital for Nervous Diseases. He is survived by his wife, one daughter and one son.

ROE, JAMES B.—Dr. J. B. Roe of Newark died June 17, 1926. Aged 52. He is survived by two children, Hale Roe and French Roe. Dr. Roe was a member of the Independence County and the Arkansas Medical Societies.

KING, STRODDER U.—Dr. S. U. King of Little Rock died June 20, 1926. Aged 73. He was born at Marshall, Illinois, and after graduating in medicine in 1886, he located in Hope, Arkansas, and moved to Little Rock in 1891. Dr. King was a veteran of the Spanish-American war and served in the medical corps during the recent World war. He was a member of the Second Baptist church, his local and state medical societies. He is survived only by his wife.

BENTLEY, CARLE EDWIN—Dr. Carle E. Bentley of Little Rock, died June 30, 1926. Aged 54. Dr. Bentley was one of the leading surgeons of the South. He was probably better known and better liked than any other physician in the State. His death was due to pneumonia. Dr. Bentley was born in California, June 12, 1872, the son of the late Dr. Edwin and Margaret Bentley. He is survived by his widow, two aunts and one cousin.

Book Reviews.

Facts on the Heart.—By Richard C. Cabot, M. D., Professor of Medicine and Social Ethics, Harvard University. Octavo of 781 pages, with 163 illustrations. Published by W. B. Saunders Company, Philadelphia, 1926. Cloth \$7.50 net.

This splendid but unusual book differs from all those previously written on heart disease in basing its conclusions wholly on the study of cases which came in the end to

necropsy. A summary of the illustrative cases given at the end of each section is most interesting and helpful.

Nephritis.—By Herman Elwyn, M. D., Assistant Visiting Physician, Gouverneur Hospital, New York. Published by The MacMillan Company, New York, 1926. Price \$5.00.

The author of this book gives the individual forms of nephritis with an attempt to correlate the clinical phenomena with the pathological changes.

In discussing the treatment of renal arterio-sclerosis he naturally calls our attention to the causes; but, in addition to the diet, hygiene, rest, etc., says that drugs have only a temporary value. Those having the most lasting effect are chloral hydrate and sodium bromide. His suggestions for administration will cause a reduction in blood pressure, lasting two weeks or months. The treatment also relieves promptly the headache, the pain in the neck and sleeplessness.

(See additional book reviews, page 19)



D-ZERTA is especially recommended for the diet in diabetic and obesity cases. It fills the need for a dessert, appetizing in appearance, appealing in aroma, agreeable to the taste, yet containing *no* sugar. Made of purest gelatin, saccharin, tartaric acid and vegetable coloring.

20 SERVINGS—\$1.00

Assorted flavors in each package

THE JELLO COMPANY, Inc.

Le Roy, N. Y.

Bridgeburg, Can.

D=Zerta
A Sugar-free Dessert

THE JOURNAL

OF THE

Arkansas Medical Society

PUBLISHED MONTHLY UNDER THE DIRECTION OF THE COUNCIL

Vol. XXIII.

LITTLE ROCK, ARK., AUGUST, 1926

No. 3

Original Articles.

PLAY AND LIFE*

EUGENE T. LIES, Special Representative,
Playground and Recreation Association of America.

Ours is said to be the day of the rediscovery of the child. In many respects this is true.

The child has been the victim of our rapidly developing material civilization. He has been lost sight of in the building of cities and even in the building of homes. Adults have brought him into existence and set him in the midst of an adult environment to do the best he can to exist in it.

Even the schools have been sacrificing the little fellow to curricula, systems, examinations and other extraneous considerations.

But, happily, a change is on. More and more we ask: "Is this a good town, not only to work in, but to bring up children in? Is it a safe town, a healthy town, a decent town? Can we all be happy in it?"

Then, wise parents, building a new home, are placing it where there is plenty of open space around it and inside they are fixing up a play-room for the youngsters.

The educators, too, are seeing a new light. They are realizing that the school's activities must all have at their center none other than the child himself. His nature, his needs, are important considerations. His personality growth is the great desideratum. How must he be handled? What must he be fed to nourish his body, mind and soul? O, what a difference in point of view!

Here, as well as among parents and civic leaders, physiologists, psychologists, social workers and others we find that life in the big sense, the life more abundant, full, vital, ever-growing, never finished, is the great goal they

are thinking of in their moiling and toiling for the welfare of our citizens in the making. Then, when one studies their plans and projects one notes the new emphasis they are all placing upon play as a life giver and a life saver.

Play is basic in life. It is the child's vocation, "the activity which the child's own nature suggests and guides," "the essential part of education, nature's prescribed course," as Joseph Lee suggests. "Without the school he will not grow up to fit our institutions; without play he will not grow up at all," he declares.

Dr. Thomas A. Storey, physiologist and physical educator, emphasizes the fact that the child at birth comes along with something like 13,000 million neurons or nerve cells, that each of these must be developed if we are to expect later an altogether normal human being and that their development will come largely through the chemical action induced by physical action.

Then, this: That the big chance to do a good job along this line comes in the first eighteen years, *i. e.*, in the period of childhood! Finally, says he, truly, that it will not be by the dull calisthenics or formal gymnastics route that we can expect the child to get this necessary development, but rather by way of the more appealing, more interesting route; namely, by way of play, with all its rich and varied possibilities. May we not declare then: "Sans play, sans life?"

Play promotes muscle-growth, health, strength, agility and blood circulation. It builds resistance to disease, lays the foundation for co-ordination and power of quick adaptation. It develops stamina, motor skill and nerve health. It strengthens heart and lungs. It caters to grace and beauty of form. All of this furthers the well-being of the child and fits him in fundamentally necessary ways for adult life. And the wonderful thing about it all is that play answers the deep hungers

*Read before the Public Health Session, 51st Annual Meeting Arkansas Medical Society, Hot Springs, May 18-20, 1926.

of the child, the urge of race experiences inexorably demanding expression anew in each new human being. Play helps to retain in the present generation the worth-while experiences of other generations. It is satisfying. It is creative. The child must have it and have it in forms which will meet the different types of hunger manifested at different age periods, or he grows up stunted. Deny it to him and you may prepare for explosions. Nature will not be cheated. True, in the physical realm, the various forms must always be adapted to the physical condition of the individual.

But all authorities agree that play also caters to the mind. By building well the body of the child it is laying the best foundation for building the mental structure. It reinforces the inherited abilities. Play deprivation means brain retardation. Indeed, Froebel has said that play is the "outward expression of an inner life." We may say that through activity the young child actually discovers his mind and through continued and varied physical activity he stimulates that mind into varied activity of its own. He learns to *will* further activity and in turn the muscles he is ever developing become the very organs of his will. He experiences repetitions of sensations and thus livens memory and imagination. He leads on to association of ideas from all his pleasurable play experiences and reason emerges. He is on his way to being a man. Indeed, as already suggested, one of the very important functions of play is to practice and rehearse adult activities.

A study made in 1914 by the U. S. Bureau of Education of the subject of "Physical Growth and School Progress" proved that physical retardation and mental retardation generally went hand in hand. Other studies have substantiated this conclusion.

Play carried over into the realm of games utilizes the earlier developed reflex movements as a basis for securing results of another sort, such as throwing to a target, catching, grappling, developing the urge to win in group activities. Here, now, is a call for competitive skill, courage, self-confidence, strategy, planning, quick judgment, learning of rules, all of them mental processes of real worth.

Then, too, at the same time this playing human being is forming wholesome moral habits and practicing the art of social living. Every playmate is a teacher. The games of

youth are an antidote to one-sidedness and narrow-mindedness. They avert unwholesome introspection and consequent morbidity and self-consciousness. They call for self-subordination and at the same time co-operation. They develop character and lay the foundation for the higher spiritual life. In and through them can honesty, loyalty, good sportsmanship, breadth, fairness, patience and discipline be most easily inculcated.

The effect of tracts and sermons upon youth is always uncertain and too often nil. The effect of the right kinds of play is certain. I must not fail to stress the point that the superior worth of the character-building values in group games under regulation lies in the fact that they accrue in an atmosphere and under conditions of freedom. The boy doesn't need to go into the game at all if he doesn't care to, but when he cares to he does so of his own free will and then he buckles down to the game's requirements. This is cheerful, self-willed submission, real virtues, and it is fitting to insert right here the following quotation from G. Stanley Hall in his "Youth, its Education, Regimen and Hygiene;" "Few realize how dangerously near physical weakness is to wickedness; how impossible healthful energy of will is without strong muscles which are its organs or how endurance and self-control no less than great achievement depend on muscle-habits." Wise words!

Are we not justified then in declaring that in constructive, motivated play, if made part and parcel of youth's every-day life, we have one of the most powerful means for catering to the all around well-being and happiness of the child and for fitting him into this present type of world, into our Democracy? And moreover, by encouraging wholesome play habits in childhood are we not making it easy for the adult that is to be to continue those habits through life? Are we not making a contribution to that training for the new leisure of which America is in such dire need? "The boy is father to the man."

I can only indicate in passing that the philosophy of the movement I represent, while stressing the fundamental and vital need of play provision for children and youth in all American communities, nevertheless, does not forget the needs of adults. It is convinced that people do not stop playing so much because they grow old, but rather that they grow old too fast because they stop playing.

I pass on to you for your personal use this prescription for growing old gracefully: "Keep limber, loving and a little bit loony."

The insurance companies are running page advertisements in magazines telling us, forty-fivers and older, to do just about this thing. Why? Why, of course, to prolong our lives—and, incidentally, to defer paying out money to the beneficiaries of our policies. Business and philanthropy in happy mixture!

Doctors of Arkansas, your State needs a law giving your towns and cities full authority to conduct recreation systems and spend money therefor. At present it has no such law. The Playground and Recreation Association of America stands ready to help you and other leaders secure it as it has done in a number of other States.

Then, when you have it, we can help you get it applied locally and aid in working out plans and programs. That's part of our job. We've been at it for twenty years.

Here is your chance for large, splendid, public service.

Play for the child is life-creation. Play for the adult is renewal of life-recreation.

You are in the life-saving business. So are we: Let's join hands and say: "For all of America we want life to be richer and more abundant," and then act on that declaration. Our children and, our children's children will rise up and call us blessed.

THE LOST CHORD

Mme. Dorothy Derrfuss, opera and concert singer, was awarded a verdict of \$35,000 damages by a jury in Judge William J. Lindsay's court yesterday as the result of a \$100,000 suit she had filed against the Chicago Rapid Transit Company. The singer alleged she suffered a dislocation of her spinal cord in a collision of elevated trains at Kinzie street on April 23 and lost her voice therefrom.

—Chicago Tribune.

THE CLOCK OF LIFE

The clock of life is wound but once,
And no man has the power
To tell just when the hands will stop—
At late or early hour.
NOW is the only time you own;
Live, love, toil with a will,
Place no faith in TOMORROW,
For the clock may then be still.

—Author Unknown.

SOME CAUSES AND TREATMENT OF CONSTIPATION OF BABIES*

JAS E. JONES, Little Rock.

It is recognized that the medical profession regards constipation as of far less importance than diarrhea—and no doubt this position concerning the matter is true, for it is based more on mortality than morbidity. I am reminded of what a distinguished pediatrician said to a mother who told him that her baby was constipated and asked him what she should do—whereupon he told her that every morning she ought to offer up a prayer of thanks to the Almighty that her baby had constipation rather than diarrhea. But when one takes into consideration the things we now know that cause this condition, and their results if not corrected, it may be that we often pass this subject up too lightly. There are some causes which if not recognized and removed will certainly be followed by serious consequences. We often think of auto-intoxication being the only phase of this condition that deserves attention, but when the causes that will be given are considered, I feel sure we all will agree that the subject has some importance.

We might first divide the causes into organic and non-organic. Under organic: stricture of the esophagus, Pyloric stenosis, congenital abnormalities of the bile ducts, atresia of duodenum, congenital narrowing of portion of colon, elongated colon, congenital megacolon (Hirschsprung's disease), fissures in ani, hemorrhoids, polypi, and tonic spasm of sphincter ani muscles. Non-organic Causes: Under this we might divide into bottle fed and breast fed babies:

Under Non-Organic Bottle Fed: Gastric Indigestion; underfeeding; too little fat; too much fat and casein; too little sugar; too dilute feedings; too concentrated feedings; excessive vomiting; boiled milk; cathartics and habit.

Under Non-Organic Breast Fed: In addition to above mentioned causes are irregularity in nursing, constipation of mother and insufficiency of mother's milk.

Taking up the causes in order given the first is stricture of the esophagus in which condition the narrowing of lumen of the esophagus

Read before the Fifty-First Annual Meeting of the Arkansas Medical Society, Hot Springs, May 18-20, 1926.

may be sufficient to permit the passage of only liquids, and therefore it can readily be seen how constipation may result. The treatment would naturally be dilation of the esophagus, so a proper diet may be taken and swallowed, thereby relieving the constipation. We usually see these cases as result of a child swallowing strong solutions of lye that the mother uses to scrub the floors.

Pyloric stenosis causes this condition by the food the baby takes not being permitted to pass beyond the stomach into the intestines. The baby may take sufficient amount and proper kind of food for its requirements ordinarily; but as it can not pass out of the stomach on account of the stenosis of the pylorus, and is vomited, constipation may result. The treatment for this condition is both medical and surgical. Statistics show that about 75 per cent of these cases may not have to have an operation to save the baby's life, but in many of these the treatment is tedious and has to be continued for long period of time. In two of the large baby hospitals of this country their procedure is to usually treat the cases medicinally and with diet for five or six days, and if at the end of this time unless distinct improvement is noted, operation is performed.

Death rate following the Ramstedt operation by a competent surgeon is practically nil; that is, if done while the baby is in fair condition. This being true it naturally follows that we should not delay a needed operation until the baby is emaciated and in a weakened condition. It can be done very satisfactorily under local anesthesia. Often the baby will suck the bottle nipple during the operation. No pain except first injection of anesthetic.

Non-surgical treatment which seems to be the most satisfactory is atropine and thick feedings. About 10 per cent flour is added to baby's milk and the mixture is boiled down to a thick consistency, and this is given instead of its regular milk feedings. About fifteen minutes before each feeding the atropine, beginning with one minim of a one to one thousand solution and increasing if necessary up to tolerance. If results are going to follow this treatment, it will be noted in a very short time. In badly emaciated babies this treatment probably should not be tried longer than a day or two if facilities for operation are anything like convenient.

In congenital abnormalities of the bile ducts where there may be stenosis or only a fibrous band instead of the duct, constipation may result. Of course, if there is absence of the duct the baby will not live more than a few days, and as to treatment in such cases we are helpless.

Constipation is found in babies with elongated colon and sigmoid. Normally the sigmoid in infants is relatively long, but in some cases where the colon is much longer than normal it seems to often cause constipation. This condition is usually diagnosed from x-ray examination. Most satisfactory treatment is probably right exercise, abdominal supports and in some cases laxatives.

In cases of atresia of the duodenum the food passes out of the stomach into the duodenum, but when it reaches the stricture where it can not pass it regurgitates and is vomited. This condition has to be differentiated from pyloric stenosis. In the latter condition vomiting does not usually begin before the third or fifth week; whereas, in atresia of the duodenum it begins soon after birth, and also in this condition bile is vomited. Bile is not vomited in pyloric stenosis. Gastro-enterostomy is the treatment for this condition, and the results obtained in the few cases that I have heard reported have been satisfactory.

Congenital narrowing, or a fibrous like condition of a portion of the colon, is fortunately not a common condition and is usually recognized only by means of the x-ray or fluoroscope. Resection has been done, but the results have not been satisfactory, especially in the very young.

Congenital megacolon, or Hirschsprung's disease, is not so uncommon. In this condition there is marked enlargement of the colon and also thickening of the bowel wall. It has been recognized clinically before baby is many weeks old. The abdomen becomes extremely large, and if let alone, the bowels do not move in some cases for many days and sometimes two or three weeks. Treatment is palliative as long as the child's condition remains fairly good. In cases that are getting progressively worse after all palliative measures have failed, operation should be considered. Resection of part of bowel has been successfully done in some of these cases.

Spontaneous cure seems to happen in some cases. The constipation that goes with these cases is treated with exercise abdominal supports, diet and whatever laxatives that may

become necessary if all the other measures are not sufficient. Rectal polypi are occasionally found in babies and may cause constipation. They do not usually remain long, but slough off and pass away. They rarely need to be removed.

Hemorrhoids are said to be a cause of constipation in babies, but it is believed by many that in many cases they do not represent the cause. It is likely that they may result from constipation, and it has been noted that in some cases where the constipation was corrected the hemorrhoids disappeared.

Fissures of the anus of babies are not uncommon, and are no doubt the cause of constipation in some cases. It is quite common to find these fissures in syphilitic babies. Five per cent silver nitrate applied locally is usually sufficient to heal them in a few days. Of course, luetic infants would need other treatment with this.

A tonic or spastic condition of the sphincter ani muscle is found quite frequently in babies, and in such cases constipation is present. The treatment is gradual dilatation of the anus with well lubricated gloved finger. It should be done every few days beginning with the little finger. These treatments seem to elicit very satisfactory results.

Under non-organic causes of constipation in bottle fed babies the first given was under-feeding and this is indeed a very important one, first because it is so easily corrected, and, secondly, failure to recognize and correct the cause may lead to so disastrous results. It can readily be seen how unfortunate it would be to be giving a baby purgatives for a condition that is already weakening it. Naturally it would be adding to what trouble it already has. It seems to have been rather conclusively shown that what we have so often in the past thought was colic the baby had from the food not agreeing with it, was simply cases of hunger, and it has been quite common to note constipation in these cases. In cases that are not recognized and treated properly it can be easily seen that the child's nutrition will suffer, and render it more susceptible to infections and lower its resistance to any disease that it may acquire. Another reason, just think how reprehensible we would consider it to be given purgatives on account of not having enough to eat. Of course, the way to determine if the baby is being undernourished is by knowing what its weight should

be; and then weigh it every few days after a change is made in the diet. If the food is proper and the baby has nothing else wrong with it, it will begin to gain in weight and constipation will be relieved.

Gastric indigestion may cause constipation by over-feeding, improper food or improper manner of feeding. How to correct over-feeding is obvious, though it might be mentioned that we now think that feeding too often rather than too much at a time is most often the cause. It seems to be important the manner the baby is fed; that is, the position the baby is in while nursing. If it be allowed to swallow air, often it will cause vomiting of the milk.

Time will not permit taking up the matter of the different elements and their proportions which it would take to constitute a proper food for a baby of given age. However, of course, that should be known in order for one to know whether or not the baby is receiving proper food; therefore, unless it is known and determined one could not possibly treat the case intelligently.

Too little fat may cause constipation as it normally serves to soften the stools and also lubricates the mucous membrane of the intestines to a certain extent. It might be mentioned here that this condition may happen with babies nursing the mother, and one way to determine it would be to weigh the baby just before and just after nursings, and if it is shown that the baby is getting sufficient quantity it may reasonably be assumed that the milk is deficient in fat as the protein and sugar of mothers milk is fairly constant that is, up to normal.

Too much fat with excess of protein may cause constipation by forming much calcium and magnesium soaps which do not stimulate peristalsis. Alkaline stools tend toward constipation.

Too little sugar may cause this condition as a matter of under-feeding, and, also, it may be regarded the normal stimulus of peristalsis; therefore it is important that it should be fed up to the normal limit.

Too dilute feedings may cause constipation in much the same way as underfeeding, for, as a matter of fact, if the food is diluted too much the baby could not take a sufficient quantity to get the required amount of nourishment and it would in that way be underfed.

In such a condition there would not be a normal amount of residue left in the bowel to properly stimulate peristalsis.

Too concentrated feedings may cause the trouble unless water be given between feedings. For unless the baby gets sufficient amount of fluids, it cannot secrete digestive juices up to normal, and constipation may result. Babies need relatively much more fluids than older people; therefore, we should see to it that the baby gets plenty of fluids.

Excessive vomiting would very readily cause constipation in the absence of any infection in the intestines, by losing both the food it takes, and part of the body fluids; therefore, we could not expect to correct it until the vomiting is stopped.

Boiled milk is more likely to cause constipation than milk not boiled, because, first, bacteria which often cause diarrhea are killed when the milk is heated and also boiling breaks down the protein causing more complete digestion and absorption by the child. However, if the milk contains sufficient amount of sugar and not an excess of fat and protein constipation does not often result in boiled milk.

Cathartics may become the cause of continued constipation, and should certainly not be given until a very thorough search has been made to determine the cause. This treatment seems to offer a path of least resistance to us, but many times they will not be needed if we will only take the time and trouble to find out the cause and remove it. Furthermore, we may be overlooking a very serious condition which is causing the trouble and this same cause may lead to other unfortunate conditions besides the constipation. And also when the habit is acquired and continued for a long period of time it is hard to correct.

In breast fed babies it is very common for them to nurse at irregular intervals, and this seems to cause constipation in some cases. For this reason, as well as others, a baby should be fed at regular intervals whether breast or bottle fed.

Constipation of the mother often causes the same condition in the baby. In examining a breast-fed baby with constipation we should never fail to find out if the mother has the trouble. If so, it should be overcome in her case before the baby is put on any kind of laxative, unless it be merely temporary.

Insufficiency of mother's milk may result in constipation of the baby. It may cause

the trouble first by baby not getting normal quantity, or it may be deficient in quality. As already mentioned when the quality is at fault it is usually low in fat, as the sugar and protein of mother's milk does not often vary much from normal. By weighing baby before and after nursing the quantity can be determined and if it is found that the quantity is up to normal we can reasonably assume that it is low in fat, and, of course, in that instance, the mother's milk should be enriched by her having proper care. If this can not be done we should resort to complement feedings for the baby.

The last, but by no means the least cause mentioned is habit. Probably it is second only to diet in the etiology of this trouble. As the results are so much more easily gotten the earlier the habits are taught the child, it would be hard to over emphasize the importance of preventing the formation of the habit.

I have heard two of the ablest pediatricians of this country say that an infant can be trained to have bowel movement by being placed on vessel at regular intervals, as young as two or three months of age. The baby is placed on the vessel and a small bland soap suppository used only a few times, and then usually when the baby is placed on the vessel that will cause bowel movement. As the child grows older it should be continually watched to see that it has movement at a certain time each day. It may seem to be a lot of trouble to the mother or nurse; but the mother should be instructed that unless it is done, and the baby acquires constipation which may follow it thru the years causing ill health, she will be put to vastly more trouble than attending to this matter while the baby is young besides forestalling the sorrow of having an afflicted child.

In those cases where laxatives seem to be necessary in nursing babies, the malt soup extracts from one to three drams dissolved in about an ounce of water and given once a day acts very satisfactorily in most cases. It can also be given in the bottle to those babies that are taking bottle instead of breast. Milk of Magnesia given in with a nursing also gives very good results.

When baby gets past six months of age we begin cereals and a little later, apple sauce, scraped apple or pear and cooked green vegetables which are usually sufficient to keep baby's bowels regulated.

CONSTITUTION AND BY-LAWS

OF THE
ARKANSAS MEDICAL SOCIETY
1926
CONSTITUTION

ARTICLE I.—NAME OF THE SOCIETY

The name and title of this organization shall be the Arkansas Medical Society.

ARTICLE II.—PURPOSES OF THE SOCIETY

The purposes of this Society shall be to federate and bring into one compact organization the entire medical profession of the State of Arkansas and to unite with similar societies of other States to form the American Medical Association; to extend medical knowledge and advance medical science; to elevate the standard of medical education, and to secure the enactment and enforcement of just medical laws; to promote friendly intercourse among physicians; to guard and foster the material interests of its members and to protect them against imposition; and to enlighten and direct public opinion in regard to the great problems of State medicine, so that the profession shall become more capable and honorable within itself, and more useful to the public, in the prevention and cure of disease, and in prolonging and adding comfort to life.

ARTICLE III.—COMPONENT SOCIETIES

Component Societies shall consist of those county medical societies which hold charters from this Society.

ARTICLE IV.—COMPOSITION OF THE SOCIETY

SECTION 1. This Society shall consist of members, delegates and guests.

SEC. 2. MEMBERS. The members of this Society shall be the members of the component county medical societies.

SEC. 3. DELEGATES. Delegates shall be those members who are elected in accordance with this Constitution and By-Laws to represent their respective component societies in the House of Delegates of this Society.

SEC. 4. GUESTS. Any distinguished physician not a resident of this State, who is a member of his own State Society, may become a guest during any Annual Session on invitation of the officers of this Society, and shall be accorded the privilege of participating in all of the scientific work for that Session.

ARTICLE V.—HOUSE OF DELEGATES

The House of Delegates shall be the legislative body of the Society, and shall consist of: (1) Delegates elected by the component county societies; (2) the Councilors; and (3) *ex-officio*, the President, Secretary and Ex-Presidents of this Society; provided, however, that the Ex-Presidents shall not have the power of voting.

ARTICLE VI.—COUNCIL

The Council shall consist of the Councilors, and the President and Secretary, *ex-officio*. Besides its duties mentioned in the By-Laws, it shall constitute the Finance Committee of the House of Delegates. Six Councilors shall constitute a quorum.

ARTICLE VII.—SECTIONS AND DISTRICT SOCIETIES

The House of Delegates may provide for a division of the scientific work of the Society into appropriate sections, and for the organizations of such Councilor District Societies as will promote the best interests of the profession, such societies to be composed exclusively of members of component county societies.

ARTICLE VIII.—SESSIONS AND MEETINGS

SECTION 1. The Society shall hold an Annual Session, during which there shall be held daily general meetings, which shall be open to all registered members and guests.

SEC. 2. The time and place for holding each annual session shall be fixed by the House of Delegates.

ARTICLE IX.—OFFICERS

SECTION 1. The officers of this Society shall be a President, President-Elect, three Vice-Presidents, a Secretary, a Treasurer and ten Councilors.

SEC. 2. The officers, except the Councilors, shall be elected annually. The terms of the Councilors shall be for two years, those first elected serving one and two years, as may be arranged, so that after the first year five Councilors shall be elected annually to serve two years. All these officers shall serve until their successors are elected and installed.

ARTICLE X.—RECIPROCITY OF MEMBERSHIP WITH OTHER STATE SOCIETIES

In order to broaden professional fellowship this Society is ready to arrange with other State Medical Societies for an interchange of certificates of membership, so that members moving from one State to another may avoid the formality of re-election.

ARTICLE XI.—FUNDS AND EXPENSES

Funds shall be raised by an equal per capita assessment on each component society. The amount of the assessment shall be fixed by the House of Delegates, but shall not exceed the sum of \$3.00 per capita per annum, except on four-fifths vote of the Delegates present. Funds may also be raised by voluntary contributions, from the Society's publications and in any other manner approved by the House of Delegates. Funds may be appropriated by the House of Delegates to defray the expenses of the Society for publications, and for such other purposes as will promote the welfare of the profession. All resolutions appropriating funds must be referred to the Finance Committee before action is taken thereon.

ARTICLE XII.—REFERENDUM

SECTION 1. A General Meeting of the Society may, by a two-thirds vote of the members present, order a general referendum on any question pending before the House of Delegates and when so ordered the House of Delegates shall submit such question to the members of the Society, who may vote by mail or in person, and, if the members voting shall comprise a majority of all the members of the Society a majority of such vote shall determine the question and be binding on the House of Delegates.

SEC. 2. The House of Delegates may, by a two-thirds vote of its own members, submit any question before it to a general referendum, as provided in the preceding section, and the result shall be binding on the House of Delegates.

ARTICLE XIII.—THE SEAL

The Society shall have a common seal, with power to break, change or renew the same at pleasure.

ARTICLE XIV.—AMENDMENTS

The House of Delegates may amend any article of this Constitution by a two-thirds vote of the Delegates present at any Annual Session, provided that such amendment shall have been presented in open meeting at the previous Annual Session, and that it shall have been published twice during the year in the bulletin or journal of this Society, or sent officially to each component society at least two months before the meeting at which final action is to be taken.

BY-LAWS

CHAPTER I.—MEMBERSHIP

SECTION 1. The name of a physician on the properly certified roster of members of a component society which has paid its annual assessment, shall be *prima facie* evidence of membership in this Society.

SEC. 2. Any person who is under sentence of suspension or expulsion from a component society, or whose name has been dropped from its roll of members, shall not be entitled to any of the rights or benefits of this Society, nor shall he be permitted to take part in any of its proceedings until he has been relieved of such disability.

SEC. 3. Each member in attendance at the Annual Session shall enter his name on the registration book, indicating the component society of which he is a member. When his right to membership has been verified by reference to the roster of his society, he shall receive a badge which shall be evidence of his right to all the privileges of membership at that session. No member shall take part in any of the proceedings of an Annual Session until he has complied with the provisions of this section.

SEC. 4. That a physician who has been a continuous member for a term of fifteen years, who is not less than sixty-five years of age, who is an honorary member of his county society, may have his name carried on the roster of the State Society and receive its publication as an honorary member and be exempt from the payment of dues.

CHAPTER II.—ANNUAL AND SPECIAL SESSIONS OF THE SOCIETY

SECTION 1. The Society shall hold an annual session at such time and place as has been fixed by the House of Delegates at the preceding annual session.

SEC. 2. Special Meetings of either the Society or of the House of Delegates shall be called by the President on petition of twenty delegates or fifty members.

CHAPTER III.—GENERAL MEETINGS

SECTION 1. All registered members may attend and participate in the proceedings and discussions of the General Meetings and of the Sections. The General Meetings shall be presided over by the President or by one of the Vice-Presidents, and before them shall be heard the address of the President and

the orations, and such scientific papers and discussions as may be arranged for in the program.

SEC. 2. The General Meetings may recommend to the House of Delegates the appointment of committees or commissions for scientific investigation of special interest and importance to the profession and public.

CHAPTER IV.—HOUSE OF DELEGATES

SECTION 1. The House of Delegates shall meet on the first day of the Annual Session. It may adjourn from time to time as may be necessary to complete its business; provided, that its hours shall conflict as little as possible with the General Meetings. The order of business shall be arranged as a separate section of the program.

SEC. 2. Each component county society shall be entitled to send to the House of Delegates each year one delegate for every twenty-five members, and one for each major fraction thereof, provided that its annual report and assessments are in the hands of the Secretary thirty days prior to the annual meeting. Every component society, however, regardless of its number of members, which has complied with this Section, is entitled to one delegate.

SEC. 3. A majority of the Delegates registered shall constitute a quorum.

SEC. 4. It shall, through its officers, Council and otherwise, give diligent attention to and foster the scientific work and spirit of the Society, and shall constantly study and strive to make each Annual Session a stepping-stone to future ones of higher interest.

SEC. 5. It shall consider and advise as to the material interests of the profession, and of the public in those important matters wherein it is dependent on the profession, and shall use its influence to secure and enforce all proper medical and public health legislation, and to diffuse popular information in relation thereto.

SEC. 6. It shall make careful inquiry into the condition of the profession of each county in the State, and shall have authority to adopt such methods as may be deemed most efficient for building up and increasing the interest in such county societies as already exist, and for organizing the profession in counties where societies do not exist. It shall especially and systematically endeavor to promote friendly intercourse among physicians of the same locality, and shall continue these

efforts until every physician in every county of the State who is reputable and eligible has been brought under medical society influence.

SEC. 7. It shall encourage post-graduate and research work, as well as home study, and shall endeavor to have the results utilized and intelligently discussed in the county societies.

SEC. 8. It shall elect representatives to the House of Delegates of the American Medical Association in accordance with the Constitution and By-Laws of that body.

SEC. 9. It shall divide the State into Councilor Districts, specifying what counties each district shall include, and, when the best interest of the Society and profession will be promoted thereby, organize in each, a district medical society, and all members of component county societies shall be members in such district society.

SEC. 10. It shall have authority to appoint committees for special purposes from among members of the Society who are not members of the House of Delegates. Such committees shall report to the House of Delegates, and may be present and participate in the debate on their reports.

SEC. 11. It shall approve all memorials and resolutions issued in the name of the Society before they shall become effective.

CHAPTER V.—ELECTION OF OFFICERS

SECTION 1. The House of Delegates on the first day of the annual session shall select a Committee on Nominations, consisting of ten delegates, no two of whom shall be from the same Councilor District. It shall be the duty of this committee to consult with the members of the Society and to hold one or more meetings at which the best interest of the Society and of the profession of the State for the ensuing year shall be carefully considered. The committee shall report the result of its deliberations to the House of Delegates in the shape of a ticket containing the names of three members for the office of President and of one member for each of the other offices to be filled at that annual session. No two candidates for President shall be named from the same county.

SEC. 2. All elections shall be by ballot, except where there is only one candidate, when election may be made by acclamation, and a majority of the votes cast shall be necessary to elect.

SEC. 3. The report of the Nominating Committee shall be the first order of business of the House of Delegates on the afternoon of the last day of the General Session.

SEC. 4. The election of officers shall be the second order of business of the House of Delegates on the afternoon of the last day of the General Session.

SEC. 5. Any person known to have solicited votes for or sought any office within the gift of this Society shall be ineligible for any office for two years. No member shall be eligible to any office of this Society who is not in attendance at the meeting at which the election is held.

CHAPTER VI.—DUTIES OF OFFICERS

SECTION 1. The President shall preside at all meetings of the Society and of the House of Delegates; shall appoint all committees not otherwise provided for; he shall deliver an annual address at such time as may be arranged, and shall perform such other duties as custom and parliamentary usage may require. He shall be the real head of the profession of the State during his term of office, and, as far as practicable, shall visit, by appointment, the various sections of the State and assist the Councilors in building up the county societies, and in making their work more practical and useful.

SEC. 2. The Vice-Presidents shall assist the President in the discharge of his duties. In the event of the President's death, resignation or removal, the Council shall select one of the Vice-Presidents to succeed him.

SEC. 3. The Treasurer shall give bond in the sum of \$6,000.00. He shall demand and receive all funds due the Society, together with bequests and donations. He shall pay money out of the Treasury only on a written order of the President, countersigned by the Secretary; he shall subject his accounts to such examination as the House of Delegates may order, and he shall annually render an account of his doings and of the state of the funds in his hands.

SEC. 4. The Secretary shall give bond in the sum of \$3,000.00; he shall attend the General Meetings of the Society and the meetings of the House of Delegates, and shall keep minutes of their respective proceedings in separate record books. He shall be *ex-officio* Secretary of the Council. He shall be custodian of all record books and papers belonging to the Society, except such as prop-

erly belong to the Treasurer, and shall keep account of and promptly turn over to the Treasurer all funds of the Society which come into his hands. He shall provide for the registration of the members and delegates at the annual session. He shall, with the co-operation of the secretaries of the component societies, keep a register of all the legal practitioners in the State by counties, noting on each, his status in relation to his county society, and, on request, shall transmit a copy of this list to the American Medical Association. He shall aid the Councilors in the organization and improvement of the county societies and in the extension of the power and usefulness of this Society. He shall conduct the official correspondence, notifying members of meetings, officers of their election and committees of their appointment and duties. He shall employ such assistants as may be ordered by the House of Delegates, and shall make an annual report to the House of Delegates. He shall supply all component societies with the necessary blanks for making their annual reports; shall keep an account with the component societies, charging against each society its assessment, collect the same and turn it over to the Treasurer, taking his receipt therefor. Acting with the Committee on Scientific Work, he shall prepare and issue all programs. The amount of his salary shall be fixed by the House of Delegates.

SEC. 5. The Council shall have authority to accept or reject all bonds.

CHAPTER VII.—COUNCIL

SECTION 1. The Council shall meet on the first day of the annual session and daily during the session and at such other times as necessity may require, subject to the call of the chairman or on a petition of three Councilors. It shall meet on the last day of the annual session of the Society to organize and outline the work for the ensuing year. It shall select a chairman and a clerk, who, in the absence of the Secretary of the Society, shall keep a record of its proceedings. It shall, through its chairman, make an annual written report to the House of Delegates.

SEC. 2. Each Councilor shall be organizer, peacemaker and censor for his district. He shall visit the counties in his district at least once a year for the purpose of organizing component societies where none exist, for inquiring into the condition of the profession,

and for improving and increasing the zeal of the county societies and their members. He shall make an annual written report of his work, and of the condition of the profession of each county in his district at the annual session of the House of Delegates. The necessary traveling expenses incurred by such Councilor in the line of the duties herein imposed may be allowed on a properly itemized statement; but this shall not be construed to include his expenses in attending the Annual Session of the Society.

SEC. 3. The Council shall be the Board of Censors of the Society. It shall consider all questions involving the right and standing of members, whether in relation to other members, to the component societies, or to this Society. All questions of an ethical nature brought before the House of Delegates or the General Meeting shall be referred to the Council without discussion. It shall hear and decide all questions of discipline affecting the conduct of members or component societies, on which an appeal is taken from the decision of an individual Councilor.

SEC. 4. In sparsely settled sections it shall have authority to organize the physicians of two or more counties into societies, to be suitably designated so as to distinguish them from district societies, and these societies, when organized and chartered, shall be entitled to all rights and privileges provided for component societies until such counties shall be organized separately.

SEC. 5. The Council shall provide for and superintend the publication and distribution of all proceedings, transactions and memoirs of the Society, and shall have authority to appoint an editor and such assistants as it deems necessary. All money received by the Council and its agents, resulting from the discharge of the duties assigned to them, must be paid to the Treasurer of the Society. It shall annually audit the accounts of the Treasurer and Secretary and other agents of this Society and present a statement of the same in its annual report to the House of Delegates, which report shall also specify the character and cost of all the publications of the Society during the year, and the amount of all other property belonging to the Society under its control, with such suggestions as it may deem necessary. In the event of a vacancy in the office of the Secretary or of the Treasurer, the Council shall fill the vacancy until the next annual election.

SEC. 6. In case of a vacancy in the office of delegate, the Council shall have authority to seat any member of that county society in attendance at said meeting as delegate, with full right to perform all the duties of that office.

CHAPTER VIII.—COMMITTEES

SECTION 1. The standing committees shall be as follows:

A Committee on Scientific Work.

A Committee on Health and Public Instruction.

A Committee on Medical Legislation.

A Committee on Scientific Exhibits.

A Committee on Arrangements.

Such committees shall be appointed by the President unless otherwise provided, so that the term of office of one member shall expire every year.

Also to make provision for the permanent filling of all vacancies that may occur through the death, resignation or removal of any member.

SEC. 2. The Committee on Scientific Work shall consist of three members, of which the Secretary shall be one, and shall determine the character and scope of the scientific proceedings of the Society for each session, subject to the instructions of the House of Delegates. Thirty days previous to each annual session it shall prepare and issue a program announcing the order in which papers and discussions shall be presented.

SEC. 3. The Committee on Health and Public Instruction shall consist of three members and the President and Secretary. Under the direction of the House of Delegates it shall represent the Association in securing and enforcing legislation in the interest of public health and of scientific medicine. It shall keep in touch with professional and public opinion, shall endeavor to shape legislation so as to secure the best results for the whole people, and shall strive to organize professional influence so as to promote the general good of the community in local, State and national affairs and elections.

SEC. 4. The Committee on Arrangements shall be appointed by the component society of the county in which the annual session is to be held. It shall provide suitable accommodations for the meeting places of the Society and of the House of Delegates, and of their respective committees, and shall have general charge of all the arrangements. Its chairman shall report an outline of the ar-

rangements to the Secretary for publication in the program, and shall make additional announcements during the session as occasion may require.

CHAPTER IX.—COUNTY SOCIETIES

SECTION 1. All county societies now in affiliation with this Society or those which may hereafter be organized in this State, which have adopted principles of organization not in conflict with this Constitution and By-Laws, shall, on application, receive a charter from and become a component part of this Society.

SEC. 2. As rapidly as can be done after the adoption of this Constitution and By-Laws, a medical society shall be organized in every county in the State in which no component society exists, and charters shall be issued thereto.

SEC. 3. Charters shall be issued only on approval of the Council, and shall be signed by the President and Secretary of this Society. Upon the recommendation of the Council the House of Delegates may revoke the charter of any component society whose actions are in conflict with the letter or spirit of this Constitution and By-Laws.

SEC. 4. Only one component medical society shall be chartered in any county. Where more than one county society exists, friendly overtures and concessions shall be made, with the aid of the Council or for the District if necessary, and all of the members brought into one organization. In case of failure to unite, an appeal may be made to the Council, which shall decide what action shall be taken.

SEC. 5. Each county society shall judge of the qualifications of its own members; but, as such societies are the only portals to this Society and to the American Medical Association, every reputable and legally registered physician and who does not practice or claim to practice, nor lend his support to any exclusive system of medicine, shall be eligible to membership. No physician or surgeon who solicits patients or business for himself or for an association or other organization of which he is a member, or by which he is employed, or in which he is interested, shall be eligible for membership in this society; and no physician or surgeon who works for, is employed by, or is interested in, any association or organization which solicits patients, members or business shall be eligible for member-

ship in this society. Any member of this society who shall hereafter violate any of the provisions hereof shall be expelled from the society. Before a charter is issued to any county society, full and ample notice and opportunity shall be given to every such physician in the county to become a member.

SEC. 6. Any physician who may feel aggrieved by the action of the society of his county in refusing him membership, or in suspending or expelling him, shall have the right to appeal to the Council, and its decision shall be final.

SEC. 7. In hearing appeals the Council may admit oral or written evidence as in its judgment will best and most fairly present the facts; but in case of every appeal, both as a Board and as individual Councilors in district and county work, efforts at conciliation and compromise shall precede all such hearings.

SEC. 8. When a member in good standing in a component society moves to another county in this State, his name, on request, shall be transferred without cost to the roster of the county society into whose jurisdiction he moves. This request must be made within twelve months after his removal.

SEC. 9. A physician living near a county line may hold his membership in that county most convenient for him to attend, on permission of the component society in whose jurisdiction he resides.

SEC. 10. Each component society shall have general direction of the affairs of the profession in its county, and its influence shall be constantly exerted for bettering the scientific, moral and material condition of every physician in the county; and systematic efforts shall be made by each member, and by the society as a whole, to increase the membership until it embraces every qualified physician in the county.

SEC. 11. At some meeting in advance of the Annual Session of this Society, each county society shall elect a delegate or delegates to represent it in the House of Delegates of this Society, in the proportion of one delegate to each twenty-five members, and one for each major fraction thereof, and the Secretary of the Society shall send a list of such delegates to the Secretary of this Society at least ten days before the Annual Session.

SEC. 12. The Secretary of each component society shall keep a roster of its members,

and of the non-affiliated registered physicians of the county, in which shall be shown the full name, address, college and date of graduation, date of license to practice in his State, and such other information as may be deemed necessary. In keeping such roster the Secretary shall note any changes in the personnel of the profession by death, or by removal to or from the county, and in making his annual report he shall endeavor to account for every physician who has lived in the county during the year.

SEC. 13. The Secretary of each component society shall forward its assessment, together with its roster of officers and members, list of delegates, and list of non-affiliated physicians of the county, to the Secretary of this Society on January 1, and not later than March 1 of each year.

SEC. 14. Any county society which fails to pay its assessment, or make the report required, on or before March 1, shall be held as suspended, and none of its members or delegates shall be permitted to participate in any of the business or proceedings of the Society or of the House of Delegates until such requirements have been met.

CHAPTER X.—MISCELLANEOUS

SECTION 1. No address or paper, before the Society, except those of the President and orators, shall occupy more than twenty minutes in its delivery, and no member shall speak longer than five minutes nor more than once on any subject, except by unanimous consent.

SEC. 2. All papers read before the Society or any of the Sections shall become its property. Each paper shall be deposited with the Secretary when read.

SEC. 3. The deliberations of this Society shall be governed by parliamentary usage as contained in Roberts' Rules of Order, when not in conflict with this Constitution and By-Laws.

SEC. 4. The Principles of Medical Ethics promulgated by the American Medical Association shall govern the conduct of members in their relations to each other and to the public.

CHAPTER XI.—AMENDMENTS

The House of Delegates may amend any article of this Constitution by a two-thirds vote of the Delegates present at any Annual

Session, provided that each amendment shall have been presented in open meeting at the previous Annual Session, and that it shall have been published twice during the year in the bulletin or journal of this Society, or sent officially to each component society at least two months before the meeting at which final action is to be taken.

THE POWER OF SUGGESTION

Personalities in the social news from New York City:

Her veil will be held in place by the good luck orange blossoms, and her bridal flowers will be white Easter lilies and baby's breath.

—Tonics and Sedatives Jo. A. M. A.

RETENTION OF VEGETABLE MATERIAL IN STOMACH

In the case here presented by Lloyd Bryan, San Francisco (Journal A. M. A., Aug 7, 1926), the retained matter was composed of celery fibers, prune and raisin skins, and other cellulose material which could not be identified. The mass was soft and loose and had to be removed with a spoon and by sponges on a sponge stick. The patient was a man, aged 55, a native of India. The past history was uneventful so far as concerned the present illness. Up to three years before, the patient had been very well. About that time he began to feel some abdominal distress, at first after meals and later constantly. It was characterized by a feeling of fullness and lightness, relieved somewhat by belching. There was occasional vomiting. At the same time there was a dull pain in the epigastrium and across the abdomen but not referred to the back or shoulder. The stools had always been formed and never tarry or clay colored. He had had diarrhea at times, sometimes six or eight stools in a day. He had never been jaundiced. The conclusion from the roentgen-ray examination was: retained foreign material in the stomach. At operation, aside from the retained vegetable material in the stomach no lesion was found. The pylorus was smooth and wide, admitting two fingers readily. Three months after the operation the roentgenogram of the stomach was normal and there was no six hour gastric residue. This case is of particular interest on account of the fact that the patient was diabetic. The blood sugar (fasting) was 301 mg. per hundred cubic centimeters of blood.

THE JOURNAL

OF THE

ARKANSAS MEDICAL SOCIETY

Owned by the Arkansas Medical Society and Published
under the direction of the Council.

WILLIAM R. BATHURST, Editor
810-812 Boyle Building, Little Rock, Arkansas.

Published Monthly. Subscription \$3.00 per year; single
copies 25 cents.

Entered as second-class matter, June 21, 1906, at the
postoffice at Little Rock, Arkansas, under the Act of
Congress of March 3, 1879.

Acceptance for mailing at special rate of postage pro-
vided for in Section 1103, Act of October 3, 1917, autho-
rized August 1, 1918.

The advertising policy of this Journal is governed by
the rules of the Council on Pharmacy and Chemistry of
the American Medical Association.

All communications of this Journal must be made to it
exclusively. Communications and items of general inter-
est to the profession are invited from all over the State.
Notice of deaths, removals from the state, changes of
location, etc., are requested.

OFFICERS OF THE ARKANSAS MEDICAL SOCIETY

J. M. LEMONS, President.....	Pine Bluff
HENRY THIBAUT, President-Elect.....	Scott
G. E. TARKINGTON, First Vice-President.....	Hot Springs
T. F. KITTRELL, Second Vice-President.....	Texarkana
J. H. FOWLER, Third Vice-President.....	Harrison
R. J. CALCOTE, Treasurer.....	Little Rock
WM. R. BATHURST, Secretary.....	Little Rock

COUNCILORS

First District—THAD COTHERN.....	Jonesboro
Second District—J. L. JONES.....	Searcy
Third District—M. C. JOHN.....	Stuttgart
Fourth District—W. T. LOWE.....	Pine Bluff
Fifth District—W. P. COOKSEY.....	Magnolia
Sixth District—B. C. MIDDLETON.....	Texarkana
Seventh District—DEWELL GANN, SR.....	Benton
Eighth District—ANDERSON WATKINS.....	Little Rock
Ninth District—LEONIDAS KIRBY.....	Harrison
Tenth District—THOMAS DOUGLASS.....	Ozark

COMMITTEES

SCIENTIFIC PROGRAM—R. J. Calcote, Little Rock,
chairman; A. S. Buchanan, Prescott; R. H. T. Mann, Tex-
arkana.

SCIENTIFIC EXHIBIT—C. E. Oates, Little Rock, Chair-
man; Homer Scott, Little Rock; D. E. White, El Dorado.

MEDICAL LEGISLATION—Earle H. Hunt, Clarksville,
chairman; J. W. Walker, Fayetteville; Thad Cothern, Jones-
boro.

STUDENT LOAN FUND—E. F. Ellis, Fayetteville, chair-
man; J. H. Lenow, Little Rock; Wm. R. Bathurst, Little
Rock; G. A. Warren, Black Rock.

NECROLOGY—C. S. Pettus, Little Rock, chairman; L.
Kirby, Harrison; E. E. Barlow, Dermott.

HEALTH AND PUBLIC INSTRUCTION—C. W. Garrison,
Little Rock, chairman; F. Michael Smith, Pine Bluff; M. E.
McCaskill, Little Rock; President and Secretary of State
Society.

CANCER CONTROL—Dewell Gann, Jr., Little Rock,
chairman; John S. Jenkins, Pine Bluff; J. C. Hughes, Hoxie.

INFANT WELFARE—A. C. Kirby, Little Rock, chairman;
N. D. McCormack, Ft. Smith; H. W. Browning, Little Rock.

HOSPITALS—J. D. Southard, Fort Smith, chairman; D.
A. Rhinehart, Little Rock; J. T. Palmer, Pine Bluff.

Editorials.

We regret to say that our readers will have to forego the pleasure of reading the usual interesting and instructive pungent paragraphs from the facile pen of our editor, who is at home trying to be sick. Unfortunately, he was not immunized against "that tired feeling." As he is attempting to treat himself, his friends are apprehensive and the Abrams' procedure has been recommended. At this writing the routine is liberal doses of acidophilous buttermilk and the patient is reported as progressing favorably and speedy convalescence indicated. Due to the milk diet referred to the entire intestinal flora has been transformed, and in due course we may look for resumption of those *flowery* editorials which have heretofore embellished our columns.

Personal and News Items.

Dr. W. D. Rose of Little Rock, has returned from an extended vacation. While away he spent two weeks resting, recuperating and rejuvenating in the mountains of Northwest Arkansas aboard a Ford supplementing with a sortie from Little Rock to Gulfport, Miss.

Dr. Ben M. Witt, Little Rock, has removed his office to the Exchange Bank Building.

Dr. J. S. Coleman, Louann, has moved to Wichita, Kansas. His address is 424 South Lorraine Street.

Dr. H. M. Keck, Rateliff, has moved to Keota, Okla.

Dr. H. R. McCarroll, Walnut Ridge, is on a vacation. He will visit New York City and other eastern points before his return.

Dr. W. H. Simmons, Pine Bluff, has returned from his vacation. He visited Chicago and other Western points in his rambles.

Dr. Paul W. Wilson has opened an office at Huttig and will be associated in general practice with Dr. A. M. Mayfield.

Dr. Theo Freedman of North Little Rock will visit New York and other Eastern points this month.

WANTED—Salaried appointments for Class A physicians in all branches of the medical profession. Let us put you in touch with the best man for your opening. Our nation-wide connections enable us to give superior service. Aznoe's National Physicians' Exchange, 30 North Michigan, Chicago. Established 1896. Member the Chicago Association of Commerce.—(Adv).

Dr. M. E. McCaskill has moved his office from the Bankers Trust Building to his own building at 711 West Capitol Avenue, Little Rock.

Dr. G. E. Cannon of Hope, accompanied by his family, has returned from an extended automobile trip, on which they visited the Sesquicentennial Exposition at Philadelphia, also took in Buffalo and Niagara Falls.

In our July issue we stated that Dr. J. M. Williams of Pine Bluff, deceased, was the father of Dr. Harry Williams, which we understand is erroneous. Dr. H. E. Williams is the father of Dr. Harry Williams.

FOR SALE—One Allison table, good as new, \$60.00. Address Journal, Arkansas Medical Society, 810 Boyle Building, Little Rock, Arkansas.

Dr. H. H. Dishongh, formerly of the Baptist Hospital, Little Rock, has opened an office in the Hall Building and will specialize in diagnosis and internal medicine.

Dr. R. H. Guthrie, who recently resigned from the staff of the State Hospital for Nervous Diseases, has moved to Walnut Ridge where he will engage in private practice. He will occupy offices of the late Dr. J. C. Swindle.

Dr. Ernest Harl White, Little Rock, has removed his office to the New Donaghey Building, where he will be associated with Dr. S. C. Fulmer in general practice.

Dr. W. R. Richardson of Little Rock, is taking a post-graduate course in urology at the Washington University and Barnes Hospital Clinics, St. Louis.

Dr. R. J. Caleote has associated himself with Drs. Caldwell and Mahoney, New Donaghey Building, where he will specialize in diseases of the eye, ear, nose and throat.

Dr. W. C. Haltom of Jonesboro, who has been recuperating for a few weeks, has reopened the Haltom Clinic at that place.

Dr. Thad Cothern has returned to Jonesboro after a month of vacation, attending officers' training camp at Fort Leavenworth and concluding with a trip thru Yellowstone Park and visiting St. Joe, Kansas City, Topeka, Cedar Rapids, Des Moines, Davenport, Springfield, Ill., and St. Louis.

Obituary.

WILLIAM HORACE BENNETT—Dr. W. H. Bennett of Paris, died July 18, 1926. Aged 59. Dr. Bennett had practiced medicine in Paris for thirty years. He was president of the Logan County Medical Society, member of the American Medical Association and a member of many fraternal and civic organizations. He was local surgeon for the Missouri Pacific lines and the Fort Smith, Subiaco and Rock Island Railroad. He is survived by his wife, two daughters and four sons, one of which is Dr. Byron Bennett, who was associated with his father in the practice of medicine.

JOHN C. SWINDLE—Dr. J. C. Swindle of Walnut Ridge, died July 10, 1926. Aged 44. Dr. Swindle was a graduate from the University of Louisville, Class of 1910. During the World War he served as a member of the Exemption Draft Board and later enlisted in the Medical Corps, serving as first lieutenant at the Roosevelt hospital in New York City for thirteen months. He was president of the Arkansas Medical Board, of which he was a member for several years. Dr. Swindle was a member of the American Medical Association, the Southern Medical Association, the Arkansas Medical Society and the Lawrence County Medical Society. He also was surgeon for the Missouri Pacific railroad.

He is survived by his wife, three sons, his father, one brother and one sister.

RESOLUTIONS

We the committee on resolutions on the death of our friend and co-worker Dr. J. C. Swindle submit the following:

Whereas, God, in his goodness, has seen fit to take from us one of our ablest workers, by whose death the Medical Board of our State has been made to grieve, because of the loss of one so efficient, so loyal and so willing to do his duty, therefore be it

Resolved, That in the passing of our friend and brother, seemingly in the prime of professional life, we know that God plucks the fairest roses first. In Dr. Swindle was exemplified true friendship, loyal comradeship and ideal ethics, a legacy that survives and endures long after our earthly bodies are crumbled into dust.

Resolved, That where, we in our restricted vision, would have kept him here, He called him to a higher life and we, the members of the Medical Examining Board desire to extend to the wife and children, our deepest love and sympathy, and be it

Further Resolved, That a copy of these resolutions be sent to the family, and to the Arkansas Medical Journal.

(Signed)

Dr. J. W. Walker,

Dr. Earle H. Hunt,

Dr. H. A. Ross.

Book Reviews.

Nursery Guide—For Mothers and Children's Nurses. By Louis W. Sauer, Ph. D., M. D., Senior Attending Pediatrician, Evanston Hospital. Second Edition. Published by the C. V. Mosby Company, 508 North Grand Boulevard, St. Louis, Mo. Price, \$2.00.

It is Dr. Sauer's intention in presenting this splendid book to aid those to whom are entrusted the care and feeding of babies. The seven chapters consist as follows: General Care and Treatment; The Nursing Infant; The Premature Infant; Artificial Feeding; Nutritional Disturbances; Some Common Ailments and Care of the Sick Infant. The book is illustrated and gives list of charts referring to record of weights, nursing chart, etc.

Diathermy With Special Reference to Pneumonia—By Harry Eaton Stewart, M. D., Formerly Attending Specialist in Physiotherapy, U. S. Marine Hospitals, N. Y. Second Edition, Revised. With Forty-five illustrations and Fifteen Charts. Published by Paul B. Hoeber, Inc., New York, 1926. Price, \$3.00.

This new book gives the technique of diathermy as an invaluable adjunct in the treatment of severe cases of lobar pneumonia. Chapter IV, gives detailed case histories.

The Surgical Clinics of North America (Issued serially, one number every other month.) Volume VI, Number II (San Francisco Number—April, 1926.) 250 pages with 73 illustrations. Per Clinic year (February, 1926 to December, 1926.) Published by W. B. Saunders Company, Philadelphia. Paper, \$12.00; Cloth, \$16.00 net.

Twenty clinics from the San Francisco hospitals constitute this issue of "The Surgical Clinics of North America."

Of unusual importance is the clinic of Dr. McNaught, Stanford University Hospital, regarding ethmoid infections. This subject is gradually being recognized as a source of many local and systemic disturbances. Seven case reports are shown in this article.

Young's Practice of Urology—Based on a study of 12,500 cases. By Hugh H. Young, M. D., and David M. Davis, M. D., Johns Hopkins University. With the collaboration of Franklin P. Johnson. Two octavo volumes totalling 1,484 pages with 1,003 illustrations, 20 being color plates, by William P. Didusch. Published by W. B. Saunders Company, Philadelphia, 1926. Per set: Cloth, \$25.00 net.

In the first chapter appears the original work of Dr. Young and his assistants on the Physiology and Anatomy of Micturition. The chapter on Obstructive Uropathy covers all obstructions of the urinary tract from the meatus to the kidney, giving very fully the instructions for the preliminary medical treatment which has reduced the mortality of prostatic operations from 20 per cent to less than 1 per cent. There are three chapters on Urogenital Infection, copiously illustrated, and giving the pathology, symptomatology, diagnosis and non-operative treatment of all general infectious diseases of the urogenital tract. An entire chapter is devoted to the most exhaustive study of tuberculosis of the urogenital tract that has ever appeared. There are 49 pages on Urolithiasis, covering the pathology, symptomatology, and diagnosis followed by the Preventive, Instrumental and Operative treatment.

Every phase of Benign Hypertrophy is covered. Malformations and Abnormalities of the Urogenital Tract are described in a most interesting and practical way. Traumatism and Foreign Bodies of the urogenital tract are fully described. The chapters on Ulcerative Lesions of the Urogenital Tract, on Diagnostic Significance of Special Symptoms and on the Examination of the Urologic Patient are of great practical value. The section on Operations comprises eight chapters and is most inclusive, describing with great detail and thoroughness every step in the operation from anesthesia to the final suture.

THE JOURNAL

OF THE

Arkansas Medical Society

PUBLISHED MONTHLY UNDER THE DIRECTION OF THE COUNCIL

Vol. XXIII

LITTLE ROCK, ARK., SEPTEMBER, 1926

No. 4

Original Articles.

SURGICAL PATHOLOGY OF PERITONITIS*

J. W. KENNEDY, Philadelphia.

It is my opinion the near future will see the surgical pathology of peritonitis completely re-written.

We are at present living in the age of insanity of uncertainty in the peritonitic lesions and the mortality of the acute conditions is several times what it should be providing the privileges of our age were put in execution. This is the hour we should be taking an invoice of our medical and surgical privileges and should receive the reward which is the due merit of our present advanced position in medical science.

Individual responsibility must be put on a higher plane. Contest between death and the fault of whom, must become a more personal matter ere individual responsibility will prick the tardy thinker and actor.

It is my opinion that fully ninety per cent of deaths in the acute pus forming or peritonitic lesions of the abdomen are due to personal or individual error.

I take it for granted that it is just as remote from progress to poorly use the knowledge of which we are already in possession, as it would be for us to be lacking in eagerness in pursuit of new scientific attainment.

Our profession has been tardy and inactive in the past twelve or fifteen years in its recognition of the necessity of putting the peritonitic lesions on a uniformly earlier operative basis.

There has been little interest shown in the pus forming lesions of the abdominal cavity during the past decade. We have been living

in the cleaner zone of the upper abdomen. During most any era of our professional life a few conspicuous teachers dominate that particular era and their impress is much seen and felt.

During recent years our most conspicuous men in America have not, so to speak, been professionally raised in the pus zones of the abdomen and thus we see a dearth of interest in the peritonitic lesions.

Much of the interest in the pus forming lesions of the abdominal cavity died with the passing away of Joseph Price who had taught more, as Dr. Murphy has said, than all the rest of us in the peritonitic abdomen.

I would strongly combat the classification of the peritonitic abdomen into operative and non-operative stages, such is responsible for most of the reprehensible teaching and results of the present day.

To wait for the subsidence of a peritonitis due to a perforated appendix is the greatest abuse of privileged surgery of the hour.

To base the extent of peritonitis upon extent of distension and tenderness is a constant error and the greatest calamity of the present day teaching.

Teachers should know that the offending appendix with a very local peritonitis involving the last few inches of the ileum, will cause general distension and tenderness of the abdomen. Such cases are not suffering from a general or diffuse peritonitis as is supposed by the watchful waiting surgeon.

This watchful waiting surgeon of the present day who is mistaken as to the extent of the peritonitis, has done much to take from us the results of priceless first-hour surgery.

I much welcome the day when operators will learn that the peritonitic abdomen has not the sign posted, "hands off" for the surgeon.

When the true pathology of peritonitis has been written, I believe we shall find that the peritonitis, *per se*, is not the source of the

*Read at the 51st Annual Meeting of the Arkansas Medical Society, Hot Springs, May 18-20, 1926.

final and fatal dose of toxemia, but that the complications of the peritonitis, bowel obstruction, distal abscesses and retro-peritoneal infection are more often the causes of death.

It is my experience that the peritonitic bowel can be manipulated with less degrees of shock than the normal bowel and that such condition welcomes the breaking of adhesions.

My experience forces me to feel that very little absorption of toxins takes place from the peritonitic bowel and therefore the bowel can be manipulated with safety in an effort to reach the infecting source, bowel obstruction, distal abscess, etc.

A comparison of the acute infectious lesions of the abdominal cavity will show that the more typical the peritonitis the less fatal the condition. Indeed, those lesions of the abdomen which are least typical of a peritonitis are the least amenable to surgery, and this is my reason for saying the peritonitic abdomen welcomes the surgeon's hand.

The puerperal infections and those conditions which we are in the habit of calling a streptococcus peritonitis, are not in a true sense peritonitic lesions and should not be called such. They are more truly toxemic in character and would better rank as retro-peritoneal infections; such conditions are rarely surgical.

The great difficulty with us all is that we have been raised professionally to feel that a peritonitis is the only lesion which may complicate the acute infectious lesions of the abdominal cavity.

Surgery of the peritonitic abdomen will come into its own when operators learn that an adhesion is not a sacred thing, but is often the cause of the fatal post-operative complications.

The numerous operations for post-operative bowel obstructions tell with inimitation the story of incomplete primary surgery.

The remaining appendix, the undisturbed bowel obstruction, the unmolested adhesions and the inferior drainage, are some of the errors of present day teaching.

It is my opinion the Fowler position will be discontinued, as we are now being told by experimenting surgeons that there is no difference between quantity of upper and lower abdominal lymphatics, but that the upper abdominal lymphatic may be more easily demonstrated.

We have always opposed the Fowler position as it places the patient to a disadvantage

on account of heart strain, and further because we have felt that very little absorption takes place from the already peritonitic abdomen.

Over fifteen years ago we stated in literature that the physiological surgeon or incomplete operator who was then coming forth, would be swamped in his post-operative complications, multiple operations, etc.

Has not my prophecy been confirmed by the present day descriptions of enterostomy and entero-colostomy for post-operative bowel obstruction which fill our literature?

No operator welcomes the peritonitic patient, but the best surgery will come from the habits of surgical industry and not from the watchful waiting of the quiescent surgeon. Conscience appeasers will never meet the demands of the surgical pathology of peritonitis.

URETERAL STRICTURE*

H. FAY JONES, M. D., Little Rock

This subject is perhaps the most actively debated one in the field of urology. It is too large a subject to take up fully in any one paper, therefore I will only attempt to cover the field in a general way.

Thanks to our faithful and untiring worker, Dr. Guy L. Hunner of Baltimore, this important, but neglected, affection is at last recognized as a definite pathological entity. Only in the last ten years has work of any note been done, most of which was done by Dr. Hunner, the major portion of his publications appearing in the last five years. It has been my privilege to know Dr. Hunner well, and hear his papers on (1) "Ureteral Stricture" on several occasions. Recent contributors on ureteral stricture of note have been (2) Rathbun (3) Livermore and (4) Goldstein and others.

Ureteral stricture is one of the most common lesions of the abdomino-pelvic cavity. Its importance will eventually be recognized, which will stop a vast number of abdominal and pelvic operations now being performed, and it will bear its chief fruit in the field of conservation. Such operations are performed in the effort to relieve the often vague and indefinite symptoms caused by some form of this condition.

*Read at the 51st Annual Meeting of the Arkansas Medical Society, Hot Springs, May 18-20, 1926.

Etiology: The etiology of ureteral stricture is a debated question. Hunner attributes ureteral stricture to focal infection occurring most usually in the teeth, tonsils or sinuses. Other workers contend that some are congenital, some due to tuberculosis, and some accompany or follow stones. Most of those that we have seen have been traceable to some focal infection, preceded by ureteritis. As rounded infiltration may be slow in developing, the ureteritis may have occurred some years before the symptoms of ureteral stricture begin. The ureter may become involved by contiguity from adjacent tissues, as in cases of ruptured appendices, seminal vesiculitis and other inflammatory conditions of the abdomino-pelvic cavity. Unless there is a stricture already present, the mechanical obstruction seen in pregnancy is occlusion rather than stricture. Ureteral stricture undoubtedly looms large in the etiology of the pyelitis of pregnancy and the puerperium. These cases should be treated by cystoscopy. Dilatation and catheterization of the ureters in pregnancy, even as late as the last week, is not a dangerous procedure.

Age: Ureteral stricture usually occurs in early or mid-adult life, altho many date their symptoms from childhood or early adolescence. Ureteral stricture is bilateral, and may be multiple; that is, one or more strictures in one or both ureters.

Symptomatology: Varies from migraine or other forms of sick headache to almost every conceivable form of chronic gastro-intestinal symptoms, such as nausea, gas formation, diarrhea, colitis, all of which have defied all efforts at medical and surgical relief. The orthopedist sees certain cases of apparent lumbo-sacral or sacro-iliac disease or sciatica, in which all efforts to relieve are fruitless. In some of these, the symptoms are due to ureteral stricture and relief is obtained after proper treatment.

The surgeon and gynecologist are daily seeing patients who complain of vague indefinite backaches, bearing down sensation in the pelvis, ovarian neuralgia, pains in the hips and extending down the thighs. If these symptoms are associated with bladder disturbances, ureteral stricture should be carefully looked for.

Genital Tract Symptoms: There is an exaggeration of the symptoms from ureteral stricture during the menstrual period. The congestion causes a narrowing of the already

strictured ureter. Hunner (5) states that there is such a phenomenon as ureteral dysmenorrhea, and that by ureteral dilatation plus the removal of distant foci of infection, such patients find relief. Some of these patients who have been relieved by these methods, had one or more cervical dilatations, while others have had more serious gynecological operations without relief.

Menorrhagia, which is usually secondary to some other condition, using a common expression, "run down condition," many of these cases recover normal menstrual flow after the improvement in general health, following ureteral dilatations.

Urinary Tract Symptoms: Backache is the most common symptom of ureteral stricture; in fact, we have never seen a case that did not complain of back pain. The pain may vary from a dull ache to severe forms. Pain along the course of the ureter and especially in the lower ureteral tract, is nearly as common a complaint as the backache. Intermittent attacks of renal colic occur, and are due to acute renal retention. These cases are the type that confuse us with renal calculi or acute appendicitis.

Bladder Symptoms: Urinary frequency is more marked in some patients than in others. Usually this symptom is not one of the patient's complaints, unless the frequency is marked or nocturnal. Some patients complain of burning on urination. Cystitis, trigonitis, urethritis are probably contributing toward the incidence of the bladder symptoms, and it is probable that in most instances the three processes are from a common cause.

Kidney infection is very frequently associated with ureteral stricture, pyelitis and pyelonephrosis being the most common. Pyelonephritis is not an uncommon occurrence. Hydroureter and hydronephrosis occurred in about 40 per cent of our cases. A greater majority of them show infection, no doubt due to the long time in which the condition has been present, before urological examination is made. Hydronephrosis with kidney prolapse is not infrequent. The largest kidney pelvis we have seen had a capacity of 530cc and was due to a ureteral stricture.

Time is too short to discuss the relationship of ureteral stricture to calculus formation or hematuria. Suffice it to say that these two conditions are frequently associated with stricture. Hunner (6) has found that many of these cases of so-called essential hematuria

are due to ureteral stricture. Fever may or may not be present, depending, of course, on the amount of infection and the immunity. General health may improve after ureteral dilatation and proper kidney drainage is established. The patients gain in weight. Many prolapsed hydronephrotic kidneys get better, due to the addition of fat around the kidney giving it better support. Some few patients, however, have to have surgical fixation of the kidney, others a partial pyelotomy or a plastic operation at the uretero-pelvic juncture.

Diagnosis: The diagnosis of ureteral stricture is comparatively easy, especially with the aid of a roentgenologist. There are three anatomical narrowings of the ureter; namely: at the uretero-pelvic juncture, at the pelvic brim and in the bladder wall. Hunner claims that in his work, he has but few strictures in these areas; but that to me is not of so great importance, for a stricture is a stricture wherever it is along the course of the ureter.

Many urologists use wax-bulb catheters and bougies to determine the location and number. This is, no doubt, the most accurate method, when a roentgenologist is not at hand. The most accurate method, the one most universally used, is by the pyelo-ureterogram. We use sodium mercuric iodide as a radiographic medium. This solution contains a very small amount of mercuric iodide in a 12 per cent solution of Na Iodide. It is not only slightly germicidal, but it is less irritating than Na Bromide.

Ureteral stricture is usually bilateral, and on catheterization quite often the symptomless side is found to be the more affected. By renal function tests, we find that the supposedly bad kidney is doing most of the work. Following treatment it frequently occurs that the function of the bad kidney so improves that it becomes better than the other one. Therefore, it behooves us not to be too hasty in doing kidney surgery.

The question naturally arises, "when is a ureter strictured?" Hunner uses wax-bulb catheters. When these hang in the ureter, he believes that a stricture is present. The size of his bulbs vary, the size generally used is F-9. Being young in this work, and probably a little ultra-conservative, I only diagnose a stricture when I have difficulty in passing a F-6 x-ray catheter. Hunner claims that quite frequently a F-6 catheter will pass a stricture where a bulb would hang and leave its mark. We know that when a catheter as small as a

F-6 will not pass easily, we are safe in saying that there is a stricture present. Many of these strictured ureters have what we call a pinhole orifice in the bladder; that is, just a hole instead of a normal slit.

Treatment: The early relief of obstruction caused by stricture of the ureter is essential, if we hope to preserve the function of the kidney. Early diagnosis in ureteral stricture is important as in other affections, the earlier the diagnosis and treatment instituted, the less damage there will be to the kidney and ureter. The treatment consists in gradual dilatation of the stricture or strictures. We use a Brown-Buerger operating cystoscope as a rule, with wax-bulbs or the Buerger graduated olive bulbs as the dilators, the size varying from F-8 to F-18. Very often it is necessary at first to use a bougie before the bulb will start, especially in a ureter with a pinhole orifice.

- When there are bilateral strictures we rarely dilate both at the same treatment. When we do, we do not dilate one as much as the other. When there is a concomitant infection, pyelitis or pyelonephrosis, this is always treated at the time of dilatation. It is often advisable to leave the ureteral catheter in place for a few hours for drainage, especially with hydronephrosis and where the stricture is resistant and infection present. After the first few dilatations, there is nearly always an exacerbation of the symptoms. After a few treatments, however, the reaction is practically nil. No one can tell the number of dilatations necessary for a cure. Three dilatations is the least number we have given with an apparent cure, but as a rule it is several more. Much, of course, depends on the time the condition has existed, and the amount of involvement of the ureter.

Conclusion: Ureteral stricture is a common condition often confused with other ailments, easily overlooked and therefore remains untreated. This is true as a rule at least until there has been much kidney damage done and useless operations have been performed, without relief of symptoms. Quite often it is necessary to relieve the condition that is a factor in producing the stricture before the patient can be entirely cured, (as in focal infections, the tonsil, uterus, etc.) If the stricture is not further attended to after such operations, then we are not likely to get complete relief. Never be too hasty in doing a nephrectomy, for on examination it

may be found that the supposedly bad kidney is the good one, and that after treatment the zero kidney may become the better one.

BIBLIOGRAPHY

(1) Hunner: Ureteral Stricture—Report (100 cases) Johns Hopkins Bulletin, 1918 XXIX, 1.
(2) Rathbun, N. P.: The Incidence of Ureteral Stricture. Journal of Urology, Vol. XIV, No. 4.
(3) Livermore, Geo. R.: Ureteral Stricture. Journal of Urology, Vol. XV, No. 1.
(4) Goldstein: Ureteral Stricture in the male. So. Med. Journal, 1921, XLV, No. 11.
(5) Hunner: End results of 100 cases of ureteral stricture. Journal of Urology, Vol. XII No. 4.
(6) Hunner: Journal American Medical Assn., Vol. 79.

DISCUSSION

DR. H. KING WADE, Hot Springs: I would like to congratulate Dr. Jones upon his most excellent paper. The etiological factor in most of our cases has been found to be a pyelitis and focal infection often found in teeth or tonsils. A grade of pyelitis has always been present in all of our cases of ureteral stricture. Whether this precedes the pathology in the ureter or is a subsequent condition we are unable to say.

We believe that the pyeloureterogram is the best method of making a diagnosis. Hunner's method of using a bulb catheter is very good, but in my opinion the x-ray is more conclusive, as it is possible for a ureteral spasm to hold the catheter and in this way give a false impression.

The treatment of ureteral strictures, as Dr. Jones has already brought out, depends upon removing the focus of infection and ureteral dilatation. The cystitis that is usually present requires little or no treatment as it is readily relieved by the treatment of the ureter and kidney pelvis.

DR. JONES, in response: I have nothing to add. As Dr. Wade says, it is simply a question of treating the ureteral stricture. It is a matter of dilatation.

Abstracts.

CHRONIC NONSPECIFIC INFECTIONS OF LUNGS

The indications for bronchoscopy in the treatment of chronic pulmonary suppuration are summarized by Chevalier Jackson, Philadelphia (Journal A. M. A., Sept. 4, 1926). In chronic pulmonary abscess, bronchoscopic aspiration is indicated to prevent stagnation. In all chronic cases, natural drainage by cough and ciliary action is inefficient; that is why these cases have become chronic. Bronchoscopic aspiration would have been prophylactic. In cases of pulmonary abscess of other than foreign body origin and in which the pediatrician, the surgeon and the roentgenologist deem external drainage advisable, bronchoscopic drainage is not indicated. Sometimes, after a thoracotomy, the surgeon has

called on his bronchoscopic assistant to restore bronchial communication for ventilation and natural upward drainage of secretions from an isolated sealed up area of lung and in other cases to treat residual suppuration areas. Many cases of chronic lung suppuration in children have resulted from mistaking the asthmatoïd wheeze of foreign body for bronchial asthma. In bronchiectasis, as Dr. McCrae has said, "bronchoscopy is of value when used early; but *early* must be stressed. This means early diagnosis, which is very rarely done. We may be able to prevent advanced bronchiectasis by early recognition and prompt bronchoscopic treatment." In every case of pulmonary suppuration, foreign body should be excluded. It is just as important in a case of lung suppuration to exclude foreign body in the esophagus as in the air passages. These two facts should be deeply impressed on the medical student. When a foreign body is present, peroral bronchoscopic removal is the only method of treatment worthy of a moment's consideration.

CHRONIC, NONSPECIFIC INFECTIONS OF LUNGS AND BRONCHI

Chronic, nonspecific, that is, nontuberculous, infections of the lungs and bronchi, in the opinion of John Lovett Morse, Boston (Journal A. M. A., Sept. 4, 1926), are far more common in early life than is generally appreciated. Physicians are likely to forget that there are such conditions and to think, therefore, that all chronic pulmonary conditions in infancy and childhood are tuberculous in origin. If these nontuberculous conditions are kept in mind and due attention is paid to the history of their development, their symptomatology and their physical signs, it is usually easy to distinguish them from those due to tuberculosis. Morse discusses chronic bronchitis, bronchiectasis, chronic bronchopneumonia, chronic interstitial pneumonia, abscess of the lung and interlobar empyema. Although these conditions are all uncommon, they can be recognized fairly readily from the history and by a careful physical examination. The roentgen-ray is not of much assistance in the diagnosis, except in abscess of the lung and interlobar empyema and in the recognition of deep cavities, when it is invaluable. None of these conditions should be confused with pulmonary tuberculosis, if the differences between them and tuberculosis are kept in mind.

THE JOURNAL

OF THE

ARKANSAS MEDICAL SOCIETY

Owned by the Arkansas Medical Society and Published under the direction of the Council.

WILLIAM R. BATHURST, Editor
810-812 Boyle Building, Little Rock, Arkansas.

Published Monthly. Subscription \$3.00 per year; single copies 25 cents.

Entered as second-class matter, June 21, 1906, at the postoffice at Little Rock, Arkansas, under the Act of Congress of March 3, 1879.

Acceptance for mailing at special rate of postage provided for in Section 1103, Act of October 3, 1917, authorized August 1, 1918.

The advertising policy of this Journal is governed by the rules of the Council on Pharmacy and Chemistry of the American Medical Association.

All communications of this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the State. Notice of deaths, removals from the state, changes of location, etc., are requested.

OFFICERS OF THE ARKANSAS MEDICAL SOCIETY

J. M. LEMONS, President.....	Pine Bluff
HENRY THIBAUT, President-Elect.....	Scott
G. E. TARKINGTON, First Vice-President.....	Hot Springs
T. F. KITTRELL, Second Vice-President.....	Texarkana
J. H. FOWLER, Third Vice-President.....	Harrison
R. J. CALCOTE, Treasurer.....	Little Rock
WM. R. BATHURST, Secretary.....	Little Rock

COUNCILORS

First District—THAD COTHERN.....	Jonesboro
Second District—J. L. JONES.....	Searcy
Third District—M. C. JOHN.....	Stuttgart
Fourth District—W. T. LOWE.....	Pine Bluff
Fifth District—W. P. COOKSEY.....	Magnolia
Sixth District—B. C. MIDDLETON.....	Texarkana
Seventh District—DEWELL GANN, SR.....	Benton
Eighth District—ANDERSON WATKINS.....	Little Rock
Ninth District—FRANK B. KIRBY.....	Harrison
Tenth District—THOMAS DOUGLASS.....	Ozark

COMMITTEES

SCIENTIFIC PROGRAM—R. J. Calcote, Little Rock, chairman; A. S. Buchanan, Prescott; R. H. T. Mann, Texarkana.

SCIENTIFIC EXHIBIT—C. E. Oates, Little Rock, chairman; Homer Scott, Little Rock; D. E. White, El Dorado.

MEDICAL LEGISLATION—Earle H. Hunt, Clarksville, chairman; J. W. Walker, Fayetteville; Thad Cothern, Jonesboro.

STUDENT LOAN FUND—E. F. Ellis, Fayetteville, chairman; J. H. Lenow, Little Rock; Wm. R. Bathurst, Little Rock; G. A. Warren, Black Rock.

NECROLOGY—Cowley S. Pettus, Little Rock, Chairman; F. B. Kirby, Harrison; E. E. Barlow, Dermott.

HEALTH AND PUBLIC INSTRUCTION—C. W. Garrison, Little Rock, chairman; F. Michael Smith, Pine Bluff; M. E. McCaskill, Little Rock; President and Secretary of State Society.

CANCER CONTROL—Dewell Gann, Jr., Little Rock, chairman; John S. Jenkins, Pine Bluff; J. C. Hughes, Hoxie.

INFANT WELFARE—A. C. Kirby, Little Rock, chairman; N. D. McCormack, Ft. Smith; H. W. Browning, Little Rock.

HOSPITALS—J. D. Southard, Fort Smith, chairman; D. A. Rhinehart, Little Rock; J. T. Palmer, Pine Bluff.

Editorial.

NON-TUBERCULOUS PULMONARY DISEASE

There are recorded in the literature many cases of pulmonary diseases that have been wrongly diagnosed tuberculosis. Perhaps the most notable work along this line has been done by Ash at the Boston Consumptive's Hospital.

Ash found that the large majority of cases that came to autopsy showed absence of pulmonary tuberculosis, and this fact is especially significant when we consider that the cases which he autopsied were sent to an institution treating advanced pulmonary tuberculosis.

During the past eighteen years we have seen several cases out of many thousands which have been diagnosed as advanced tuberculosis, but on careful examination no tubercle bacilli have been found in the sputum and the tuberculin test and x-ray have been negative for tuberculosis.

We do not want to go on record as saying that we expect to find tubercle bacilli in the sputum before diagnosing tuberculosis, especially in the incipient and non-ulcerative moderately advanced cases, but we do subscribe to the generally accepted opinion of diagnosticians that in a given case with marked and extensive physical signs and a large amount of expectoration bacteriologically negative for the tubercle bacillus, some disease other than tuberculosis is present.

We frequently find superimposed on a pulmonary tuberculosis some other infection, especially in the lower lobes, that is confusing without sputum examination and roentgen-ray examination.

On the male service of the State Tuberculosis Sanatorium, we have recently had three cases of pulmonary diseases that were not tuberculous in nature. Brief histories of these cases follow:

Case 1. A. M. Physical examination showed a large cavity in the right upper lobe, with very extensive pleural thickening. Sputum large in amount, persistently negative for tubercle bacilli and tuberculin test repeatedly negative. This was very evidently an abscess of the right upper lobe. Artificial pneumothorax was attempted but on account of marked adhesions a compression of the cavity was not obtained.

Case 2. T. T. Physical examination showed marked impaired resonance throughout left lung with signs of cavitation in the upper lobe, and atypical rales throughout. Sputum small in amount, persistently negative for tubercle bacilli and the tuberculin test was negative. The cervical and axillary glands were enlarged and tender. We suspected a possible malignancy, but examination of the sputum showed no cancer cells. There was, however, evidence of a fungus infection and large doses of potassium iodide were administered with a good improvement in the patient's condition.

Case 3. A. McC. Physical signs showed an infection of the entire left lung and the upper lobe of the right. The x-ray examination showed marked fibrosis in the left lung, but it was not typical of tuberculous disease. The sputum was persistently negative for tubercle bacilli and fungi. This patient had an apparent gall-bladder infection. Tuberculin test was repeatedly negative. Insulin was given this patient, thirty units one half hour before dinner and on the treatment he gained twelve pounds in weight. Even an experienced chest man would probably call this case one of pulmonary tuberculosis as the physical signs were so typical. However, repeated sputum examinations were negative for tubercle bacilli and the x-ray picture was other than tuberculosis. This was evidently a generalized infection of the lungs and gall-bladder and, possibly pancreas. His response to insulin was remarkable.

Every patient with marked physical signs and expectoration of large amounts of sputum deserves a thorough examination before being branded as tuberculous.

Often, especially in fungus infection, these non-tuberculous pulmonary conditions can be treated with better results than can the advanced tuberculous infection.—John Stewart, M. D. and H. F. Gammons, M. D., Booneville, Arkansas.

Abstracts.

IS TRACHOMA A DEFICIENCY DISEASE?

B. Franklin Royer, New York (Journal A. M. A., Aug. 14, 1926), says that what is needed today is first of all to discard as fact much of the published literature with reference to contagiousness, transmissibility and prevalence of trachoma; a recasting of all the

evidence and a broad-gage epidemiologic research into every possible influence that might permit this disease to develop whether it is due primarily to a food fault or to a specific virus; to gather all evidence without bias and to weigh it in the balance for the purpose of determining the real epidemiology of one of the world's great scourges. On food studies alone, exhaustive inquiry must be made in the homes in which trachoma has developed. It would also seem desirable to initiate feeding experiments with some of the larger animals in which it is known xerophthalmia may be produced by proper manipulation of diet and, at some point short of reaching keratomalacia, begin systematic irritation of the upper lid membranes with known irritants at frequent intervals continued over a period of months, to see if a pathologic condition comparable to trachoma may be developed. Irritation might be continued in other animals on similar food experiments, but by adding the known bacteria frequently invading the eye, and by inoculating and reinoculating until long continued irritation is produced from bacteria or their products. Control studies would check against error. With a widespread distribution of trachoma among peoples not yet educated in public health procedure, an international problem is before the world that is not alone a challenge for epidemiologic research, but a challenge in health education and administration. If the fault is primarily dietetic, let us learn it and broadcast the remedy. If it is a specific virus, let us get indisputable epidemiologic evidence and base our health activities on facts.

SUBACUTE BACTERIAL ENDOCARDITIS

Thirty cases of subacute bacterial endocarditis form the basis of Walter L. Bierring's, Des Moines, Iowa (Journal A. M. A., Aug. 14, 1926), analysis of the clinical history of this disease. Rheumatism was the previous infection in twenty cases; influenza in three, scarlet fever in three, tonsillitis, measles and chorea, in one case each. In twenty-one cases reinfection was due to an attack of influenza. The mitral valve alone was involved in twenty-two cases. The duration of the disease varied from fourteen to sixty weeks. Enlarged spleen, Osler's nodes, acute glomerular nephritis and petechiae were present

in all cases. Only six of the thirty patients are alive, and in none of these does the disease date back further than February, 1925. The importance of the prognostic point of view in this condition is to be strongly emphasized. Almost all these cases appear mildly innocent at the onset, and there is a strong temptation to regard them lightly and promise a speedy recovery, yet death is the usual termination. There are a comparatively small number of recoveries reported. This is a disease that is liable to distinct remissions of improvement. The fact that the blood stream is often bacteria free for long periods is suggestive of a remission stage, although cases have been reported in which the patient succumbed to exhaustion and embolic complications after the fever had subsided and the blood was bacteria free. Another feature to be considered in venturing a prognostic opinion is that well marked healing changes have been observed post mortem in the affected valves and the mural endocardium. Since this is distinctly an infective process, and in many instances due to a particular micro-organism, it is natural that some form of immunotherapy has been given a prominent place in the different forms of treatment proposed. Unfortunately, the different forms of vaccine treatment have not given any appreciable results. Chemotherapy includes the use of a large number of drugs, principally the colloidal metals, collargol, arsenic derivatives, quinine and salicylates, with the recent additions of neutral acriflavine mercurochrome-220 soluble and gentian violet. Intravenous injections of large doses of sodium cacodylate is the form of therapy that has been used principally in the group of cases comprising the authors' series, including two instances of apparent recovery. Transfusions of blood have been employed principally in the cases with a low percentage of hemoglobin. An improvement in the blood state was noted, and in a few instances a disappearance of bacteria from the blood stream for a short period. A successful or specific form of therapy is still to be developed.

COD LIVER OIL AND SUN KEEP CHILDREN WELL

The slogan of today is: Keep the well child well, declares Dr. Louis W. Sauer in *Hygeia* for September. Two of the physician's allies in this task are cod liver oil and sunlight.

The condition of the bones and teeth, particularly the unerupted teeth, is affected by diseases such as congenital syphilis and scarlet fever, but even more by diet and hygiene. Rickets is a disorder of nutrition that exerts a harmful effect on the bones and teeth by producing in them a faulty deposition of calcium phosphate.

This faulty deposit is not due to an inherent quality of the bones and teeth but to a deficiency in the blood serum that bathes and feeds these structures of the body. Cod liver oil contains a specific curative substance for this disease called the antirachitic vitamin, which mobilizes in a physiologic way the calcium and phosphorus of the blood serum.

Scientists have also learned properly to appraise sunlight. Besides the warmth that the sun radiates to the earth, it sheds invisible rays that make plants and animals grow. For that reason sun baths on warm days are very beneficial. However, the skin must be exposed gradually, so as to prevent serious burning. On very hot days sun baths should be given before eleven or after three o'clock.

Personals and News Items.

Dr. and Mrs. W. E. Gray and family have returned from a trip of two weeks in the Ozarks.

Dr. and Mrs. Lloyd Thompson have returned to Hot Springs after a summer in the East.

Dr. and Mrs. James L. Dibrell have returned from a motor trip to Mississippi, Alabama, Tennessee and points in the West.

Dr. Paul Mahoney of Little Rock, a member of the firm of Caldwell and Mahoney, has been elected eye, ear, nose and throat specialist for the Arkansas School for the Blind. Recently he was elected to a similar position at the Arkansas Deaf Mute Institute.

Dr. Dewell Gann, Jr., has recently returned from a trip to Colorado Springs.

Dr. C. W. Garrison, State Health Officer, has recently returned from Blytheville where he conferred with a committee from the Mississippi County Chamber of Commerce and the County Medical Society regarding plans to organize a full-time County Health Unit.

Dr. William R. Bathurst, who has been ill for some time, is convalescing.

Dr. G. W. Jones has moved from Moreland to Atkins. His office will be in the Cheek Building.

Dr. F. H. Garrett of Prescott, has accepted a position on the staff of the State Hospital for Nervous Diseases.

Dr. E. M. Hudson, Little Rock, recently returned from a three weeks sojourn at the Mayo Clinics.

WANTED—Salaried appointments for Class A physicians in all branches of the medical profession. Let us put you in touch with the best man for your opening. Our nation-wide connections enable us to give superior service. Aznoe's National Physicians' Exchange, 30 North Michigan, Chicago. Established 1896. Member the Chicago Association of Commerce.—(Adv).

Obituary.

SIMPSON, ALBERT ROSS—Dr. A. R. Simpson of Corning, died in a Little Rock hospital, August 19, 1926. Aged 66. He was a graduate of the Louisville School of Medicine, Class of 1882. He was a member of the American Medical Association and the Arkansas Medical Society, and local surgeon for the Missouri Pacific Railroad.

He is survived by his wife and one son, Perry Simpson of Little Rock.

KIRBY, LEONIDAS—Dr. Leonidas Kirby of Harrison, died August 20, 1926. Aged 75. He was born in Green County, Missouri, December 1, 1850, and was active as a physician and surgeon in Harrison for 55 years. He was a former president of the Arkansas Medical Society, and had always taken an active part in both County and State Medical Societies. He was Grand Master of the Masonic Lodge of Arkansas for years, and was a member of the State Board of Health.

He was married in 1871 to Miss Rhoda V. Crump, who survives him. He is also survived by three sons, Dr. A. Crump Kirby of Little Rock, Dr. Frank Kirby and Lee Kirby a druggist of Harrison, and a daughter, Mrs. E. L. Evans of Springfield, Mo. He was the father of the late Dr. H. H. Kirby of Little Rock.

County Societies.

MONROE COUNTY

(Reported by W. L. BOSWELL, Sec.)

The Monroe County Medical Society met in Clarendon, August 11, 1926.

Present: C. H. McKnight, Stout, Houston, Phipps and Boswell. Visitor: Miss Murry, County Nurse.

Miss Murry outlined the work she intends doing and asked the co-operation of the Society in the "Pre-School Age Clinic" to be held during the County Fair. The Society promised to assist her in carrying out this work. A Tuberculosis Clinic also was discussed, and men were selected, from a list furnished by Miss Chambers, to ask to come to the county and hold this Clinic at a date to be chosen later.

Dr. Phipps read a paper on "Purpura Hemorrhagica."

Drs. Houston and Stout will read papers at the next meeting, which will be held in Brinkley, September 14th.



D-ZERTA is especially recommended for the diet in diabetic and obesity cases. It fills the need for a dessert, appetizing in appearance, appealing in aroma, agreeable to the taste, yet containing **no** sugar. Made of purest gelatin, saccharin, tartaric acid and vegetable coloring.

20 SERVINGS—\$1.00

Assorted flavors in each package

THE JELLO COMPANY, Inc.

Le Roy, N. Y.

Bridgeburg, Can.

D=Zerta
A Sugar-free Dessert

Found in the laboratory of the practical medical man

Only a few years ago High Frequency apparatus was to be found only in the hospital laboratory or the physio-therapist's office.

—but today it is to be found as an integral part of the general practitioner's equipment.

—and the Acme-International Polytherm Generator, with its unusual flexibility—its convenience of operation—its maintenance of full efficiency even in continuous use—and its superb general appearance has become the standard from which High Frequency Apparatus in general is judged.

A card, a letter or a wire to our nearest office will bring full information about it. Ask for Bulletin 27.

W. A. ROSENTHAL X-RAY CO.

General Offices: Kansas City, Mo.

Branch Office:

306 Medical Arts Bldg.
Oklahoma City, Okla.

Arkansas Representative:

F. R. SHELLEY
511 Rock Street
Little Rock, Ark.



NEW HOTEL PRESIDENT
Baltimore at Fourteenth Street

DAILY CLINICAL BULLETIN published the year round, listing medical and surgical clinics in hospitals and offices in greater Kansas City. Visiting physicians may secure this bulletin any time at Union Station or any hospital.

Kansas City Annual Fall Clinical Conference

October 11-12-13-14-15, 1926, on the Roof Garden of the New

HOTEL PRESIDENT, Kansas City Missouri

ASSOCIATED MEETINGS: Medical Association of the Southwest, Midwest Association of Anaesthetists.

OFFERING again for the fourth year a program of clinics, lectures, demonstrations, motion pictures and unusual scientific and technical exhibits.

LECTURES AND CLINICS by eminent specialists, operative and diagnostic clinics at all allied Hospitals in Greater Kansas City.

THE FOLLOWING IS A PARTIAL LIST OF DISTINGUISHED GUESTS WHO HAVE ACCEPTED INVITATIONS TO LECTURE AND HOLD CLINICS

Thomas McCrae, Medicine, Philadelphia, Pa.
Frank H. Lahey, Surgery, Boston, Mass.
Wm. McKim Marriott, Pediatrics, St. Louis, Mo.
Edwin W. Ryerson, Orthopedics, Chicago, Ill.
Irving W. Potter, Obs. and Gyn., Buffalo, N. Y.
Percy Brown, Radiology, New York City.
Royal S. Copeland, Public Health, New York City.
Clemens Von Pirquet, Pediatrics, Vienna, Austria.
Arthur L. Chute, Urology, Boston, Mass.
Dean DeWitt Lewis, Surgery, Baltimore, Md.
F. H. McMeehan, Anaesthesia, Avon Lake, Ohio.

KANSAS CITY CLINICAL SOCIETY—Kansas City, Missouri

631 RIALTO BUILDING

TELEPHONE, DELAWARE 2398

THE JOURNAL

OF THE Arkansas Medical Society

PUBLISHED MONTHLY UNDER THE DIRECTION OF THE COUNCIL

Vol. XXIII.

LITTLE ROCK, ARK., OCTOBER, 1926

No. 5

Original Articles

FINDINGS IN A SERIES OF CASES OF CHOLECYSTITIS*

ANDERSON WATKINS, M. D., F. A. C. S.
Little Rock.

These were 274 cases at St. Vincent's Infirmary at Little Rock, diagnosed as cholecystitis. A review of the individual records prompted me to discard 25 of them as either improperly diagnosed or with insufficient data to make a diagnosis. This leaves for our consideration 249 cases of which 34 are listed as acute or sub-acute and 215 as chronic. It is really impossible to dogmatically separate the acute and chronic cases. The average age was 41 years, the oldest 83 and the youngest 17. There were 213 operations which will be discussed later. The 36 non-operative cases are accepted as biliary tract infections on clinical and x-ray evidences. As to the latter, there are a few cholecystographies in this series, but not enough from which to draw conclusions. The use of the dye in more recent cases will be reported in a paper by Dr. D. A. Rhinehart.

Pain is given as a symptom in 224—90 per cent—of the 249 cases. Of these, 80 per cent describe the pain as in the right upper quadrant and radiating to the right chest and shoulder. In many of these cases both right quadrant were involved, due to appendicitis complicating the cholecystitis. In 5 cases the pain is to the upper left abdomen; 11 cases described the pain as occurring in both upper quadrants; in 23 the pain was chiefly in the epigastrium. The pain was lumbar in one case, and questionable, or very mild, in 5. Location of pain by patients is often vague and unsatisfactory; but its predominance in the right upper quadrant in this series is significant. The pain varied from a soreness

to a cramping or colicky type, and was not dependent upon whether the stomach was fasting or full.

Indigestion or flatulence or both were noted in 134 histories, 54.6 per cent.

Nausea and vomiting occurred in 184 patients—73.9 per cent. These symptoms were exhibited in 23 of 30 cases of pancreatitis complicating the gall-tract disease—76.6 per cent. There were 219 cases of biliary tract disease without pancreatitis; 73.5 per cent of the 219 had nausea and vomiting. The percentage difference between cholecystitis cases without pancreatitis involvement and the pancreatic cases displaying nausea and vomiting is negligible.

Jaundice occurred in 49 cases—15.6 per cent. 32 or 65 per cent of the jaundice cases had stones, either in the gall-bladder or ducts; 6 of the duct stones were in the common duct. Reversing the point of view, there were 104 cases of stones in the gall-bladder and ducts without jaundice. Add these to 32 cases with jaundice we have 136 cases of stones of which only 23.5 per cent had jaundice. By this we mean a history of previous jaundice or jaundice at the time of examination. Less than 32 per cent of the common duct stone cases had jaundice.

These figures lend additional evidence that cholecystitis with or without stones is not the sole factor in the production of obstructive jaundice. A cholangitis either of the common duct, the hepatic duct or its radicals is essential to an obstructive jaundice. The intermittent obstructive symptoms found in familiar ball-valve stone in the common duct or obstruction by extrinsic pathology as adhesions, tumors or pancreatitis exemplify this truth.

The total leucocyte count averaged 11,281, the average polynuclear percentage being 74 per cent. This is an average of acute and chronic cases, the chronic vastly predominating. The higher count was 31,500; most of

*Read at the 51st Annual Meeting of the Arkansas Medical Society, Hot Springs, May 18-20, 1926.

the cases during an acute phase, ran from 14,000 to 18,000. Many chronic cases developed more or less acute phases at times, but were usually operated during an interval.

The etiologic aspects of our cases are not definite. Several sources of infection no doubt exist as typhoid, blood stream of lymphatic invasion from a primary focus elsewhere or infection from bacteria laden bile. 57 patients—24 per cent—gave a history of typhoid; of some probable significance are 77 cases of appendicitis complicating cholecystitis. Primary focal infection elsewhere as a possible cause of gall-bladder disease in our cases has been woefully neglected.

PATHOLOGY. The regional and associated pathology is extensive. Gall-bladders are described as suppurative, hydropic, small and contracted, as empty, strawberry, as comparatively free of adhesions, buried in them, full of stones and with no stones. The usual histologic features of acute and chronic inflammation are described. In some the mucosa is denuded, in others the folds are exaggerated; in still others, the chronic infiltration is in the serous or connective tissue coats. The cystic and hepatic ducts contained stones in 23 instances. There was also a case of pancreatitis in which the common duct was obstructed without stones. A subphrenic abscess complicated one case; carcinoma of the liver a second and carcinoma of the kidney a third. Adhesions are only specifically described in 22 cases. These add to the difficulty of operative technique and are not conducive to a good post-operative career. There are a number of other complications including 16 pelvic cases requiring surgery, but our principal interest is in certain lesions more intimately associated with the biliary tract. The appendix, though anatomically distant is intimately hooked up lymphatically with the right upper abdomen. As we shall note later on, injection of the ileo-cecal lymph nodes reaches those in the upper right quadrant. We cannot discard the importance of 77 cases of appendicitis in 213 operated cases of cholecystitis as an etiologic factor. The percentage is 36.

Lymph node enlargement is mentioned in 36 cases; 1 mesenteric and 35 in which the enlarged nodes were found along the course of the ducts. It is probable that more cases had adenopathy than were noted. In these cases of lymphatic involvement, there were 9 of 17 cases of hepatitis and 10 of 30 cases of pancreatitis.

Hepatitis is recorded in 17 cases; this means a gross pathology susceptible of observation by the operating surgeon. The notation of hepatitis implies a regional and general condition of the patient which permits of examination of the liver, but also care and training on the part of the surgeon, which will cause him to look for and recognize the lesion. In this connection, it is pertinent to state we have done no work in the way of testing the liver function in our cases. It is true that most of them rather antedate these tests, but sufficient standardization has been accomplished to warrant some investigation on our part.

Recently there has appeared a report by Berger, Cohen and Selman (12) from their service at Mount Sinai Hospital, a report of the use of five liver test functions on 100 patients. These tests comprise the Van der Bergh, the Widal, the Rosenthal, examination of urine for urobilin and urobilinogen and of the urine for bile salts. Their positive findings are of interest and, if confirmed, of diagnostic value. Thus all five tests were positive in all cases of toxic jaundice and again in obstructive jaundice due to stone. In jaundice due to tumors of the pancreas or biliary ducts, all tests were positive except the Widal.

Involvement of the pancreas is a most interesting complication, perhaps the most interesting in the series. Induration of this organ; that is, chronic pancreatitis is mentioned in 30 operated cases—14 per cent. In the remaining cases it is either described as soft or ignored; most frequently the latter. Location of pain 76 per cent on the right and 24 per cent on the left is not of great diagnostic value, because of the accompanying cholecystitis. Nausea and vomiting was observed in 76 per cent of these patients. In one or two cases I have observed an intractable projectile type of vomiting without nausea. Hinton (3) has made similar observation.

It is noteworthy that only 10 per cent of these pancreatic cases had glycosuria while under observation and of these only one was diagnosed as a diabetic while in St. Vincent's. The relationship of gall-bladder disease to pancreatitis and of the latter to diabetes mellitus is a very interesting subject and, of course, the solution is by no means completed. Discarding the explosive acute pancreatitis, the important type of inflammation is the chronic, which is more frequent and which

consists of an increase of connective tissue, interlobular in deposition, according to Adami and McRae (1). Sweet (2) says that the chronic pancreatitis is an interlobular lymphangitis. Hinton (3) quoting Bartels and the work of Braithwaite (4) also Franke (5) states that lymphatic drainage from the ileocecal region and the biliary tract is to the pancreatic head and that from the left side of the abdomen is to the body and tail. Deaver and Pfeiffer (6) quoted by Hinton, report a series of 52 cases of chronic pancreatitis in which they found the head alone infected in 80 per cent of the cases the inflammation in the head being localized in the triangle of pancreatic tissue between the duodenum and the converging ducts of Wirsing and Santorini. In the present series, the head only was involved in 96 percent. Deaver reporting 79 cases states that 91 per cent showed evidence of biliary tract infection. (7) W. J. Mayo reports that 90 per cent of cases of acute and chronic pancreatitis have been operated for cholecystitis usually with stones.

Pancreatitis as a clinical entity is evidently difficult to diagnose. It may cause post-operative colic after gall-bladder operations inducing the belief that there is a stone undetected in the common duct. Some of these cases will clear up if given a little time. I had one case which had colic after a cholecystostomy with removal of gall-bladder stones and which was advised elsewhere to be re-operated, but declined. He has been free of symptoms for over one year.

Twenty cases had glycosuria. One was a diabetic; the remainder were not consistently glycosuric and apparently had a good carbohydrate tolerance. Even the diabetic was only moderately so and her tolerance increased after operation.

Thus of 249 cases of cholecystitis, 8 per cent exhibited glycosuria.

Of 30 cases of pancreatitis only 10 per cent exhibited glycosuria at any time. One was a true diabetic. Of 20 cases of glycosuria, 3 were cases of pancreatitis. Here we do not find a parallel between inflammation of the pancreas and glycosuria. This fact is noted in a series of necropsies on 58 diabetics in a paper by Wilder (8). In his cases, the insular and general pancreatic lesions were trivial in some severe diabetics, and extensive in some cases which had less severe grades of diabetes dying of complicating diseases. Quoting Kara Kaseheff (9), he states that the latter was unable to find sufficient change in

the pancreas to account for the existence of diabetes in 11 cases, 4 of which died in coma. Hansemann (10) reported four cases in which the pancreas had been replaced by tumor tissue without the production of diabetes. In our own series is a case of chronic pancreatitis with marked enlargement and induration.

The illness began six months prior to operation, attacks averaging one per week. There were severe epigastric pains radiating to the right shoulder, jaundice, flatulence and no glycosuria. The gall-bladder pathology is not described, but the operative record states that no stones were found. Cholecystostomy was followed by an apparently complete recovery.

Wilder (8) states that new researches into insulin have strengthened tremendously the views of Naunyn as to the nature of diabetes. Naunyn (11) believed that diabetes occurs in persons with an inherited predisposition. If this predisposition be strong, the ordinary metabolic strains of a normal life are sufficient to break down the ability to utilize sugar. If the predisposition be weaker, abnormal metabolic strains, such as excessive eating or lesions of the pancreas, will result in diabetes. The phrase, "Ability to utilize carbohydrates," may be modernized into, "Ability to make insulin."

Insulin, or a similar substance, is not the product of the pancreas only. It is almost a universal function of living cells, but is perhaps less active in the vertebrates. In the higher forms of life the pancreas is especially designated to care for sudden increase of carbohydrates following a meal. A sudden experimental ablation of the eight pancreas produces death. Let us suppose the total insulin function in a normal individual to be represented by the figure 2, of which the pancreas is 1 and other tissues 1. A gradual diminution of the pancreatic insular function is compensated by other tissues—no diabetes or a mild diabetes results. Suppose the pancreas represents $1\frac{1}{2}$ to $1\frac{3}{4}$ of the available sources of insulin—a loss of its function results in a severe diabetes.

In the operative follow-up of the present series 10 cases report symptoms of diabetes. Some with 2 or 3 and others with 3; viz., glycosuria, abnormal thirst and loss of weight. One of these was a known diabetic; 2 had transient glycosuria and 7 had no diabetic symptoms. Of 76 operative cases living and heard from, 9 per cent show symptoms of diabetes developing after operation.

Besides the indicated surgery for stone in the duct, 13 in all and operated by the usual technique, there were 74 cholecystostomies and 139 cholecystectomies, 213 in all. Deducting 2 carcinoma cases from the latter, there were 137 cholecystectomies and 211 operations.

Mortality:

Cholecystostomies	74.
Deaths	5.
Mortality	6.75

Causes of death:

Broncho-pneumonia	1
Acute cholecystitis and peritonitis	3
Post-operative adhesions (2 mos.)	1

Total.....5

Cholecystectomies	139
Deaths	2
Mortality	1.46%

Causes of death:

Post-operative shock.....	1
Subphrenic abscess	1

Total.....2

Operative results in living patients:

	Checked	Cured	Imp.	Unimp.
Cholecystostomy	30	50	23	26
Cholecystectomy	46	48	26	26

The above figures present no practical difference in the results of the operation. The choice of drainage or extirpation depends upon the indications. The mortality of cholecystostomy in the present series is 6.75 per cent, over 4.5 times that of cholecystectomy a more complicated procedure. Some of this difference may be due to the individual operator; but no doubt most of the deaths following the simple drainage were due to infection existing at the time of operation. Some cases may have been operated too late; others too early; some could not have survived in any event; but no doubt an early interval operation could have saved more patients. This is only reasonable as pathology regional and general increases with each acute attack. An experience in opening abdomens which have borne the brunt of numerous acute pathologic storms argues against procrastination.

SUMMARY

1. Etiology—Typhoid is a factor in the production of biliary tract disease.

Appendicitis bears a similar relationship.

Primary foci elsewhere as possible sources

of gall-bladder infection should be thoroughly investigated in each case. We are possibly neglecting an important factor when we overlook this point.

2. Symptomatology—Pain, varying from a soreness to severe colics, nausea and vomiting are cardinal symptoms. 80 per cent of the pain is to the right and principally in the right upper quadrant. Appendicitis will naturally cause pain in the lower right belly. Indigestion and flatulence were observed in over 54 per cent. The leucocyte count average is increased though not invariably.

Jaundice is not a frequent symptom.

In the diagnosis, no one disputes the value or necessity for cholecystography.

The clinical laboratory tests for liver function offer valuable differential indications and are worthy of investigation on our part. On the whole, clinical signs remain as criteria par excellence.

3. Pathology—Liver disease is not an insignificant pathologic feature in cholecystitis. It is not sufficiently looked for during operations. Pancreatitis is a part of, or sequel of, biliary tract infection. It is often a sequel but adds to the picture. It is usually chronic. It is in some instances the cause of post-operative colic. It may disappear if given time after a bile-tract operation. It is an uncertain, but unquestionable cause of diabetes initiated by cholecystitis. Its pathology is not commensurate with the severity of the diabetes which is determined by other factors, as, for instance, the insulin function of the entire organism. Cholecystitis has a very probable part in the production of pancreatic diabetes.

4. Operative results—Cholecystostomy in our cases had a higher mortality than extirpation, but drainage of the gall-bladder is done in the presence of more acute infection. It is probable that this mortality may be lowered by better preparation of patients and selection of time for operation. It is also true that many patients may be saved by earlier operation at a proper interval except in threatened perforation rather than permitting years of pathology to exist and increase.

The post-operative results in those surviving patients who have been heard from are practically the same in cholecystostomy and cholecystectomy. This simply means that indications should be met; the acute cases drained at the proper time and chronic gall-bladders extirpated.

CHOLECYSTITIS BIBLIOGRAPHY

1. Adami and McRae—Textbook of Pathology. Lea and Febiger, Phila. and New York, 1912 Page 595.
2. Sweet, J. E. The Surgery of the Pancreas, Phila. J. B. Lippincott Co.
3. Hinton, J. Wm. Chronic Pancreatitis as a Clinical Entity. Surgery, Gynecology and Obstetrics. Oct., 1925, Page 422.
4. Braithwaite, L. R. The flow of Lymph from the Ileo-Cecal angle and its possible bearing on duodenal and Gastric Ulcers. Brit. Med. Jour, 1923 x1.
5. Franke, Duetsche Ztschr. f. Chir. Sept., 1911.
6. Deaver and Pfeiffer. Ann. of Surg. 1913, LVII—151.
7. Mayo, W. J., Acute Perforations of the Abdominal Viscera, Surg., Gyn., and Obstet., 1919, xxviii, 28-32.
8. Wilder, Russell M. Necropsy Findings in Diabetes. South. Med. Journal, April, 1926, 241.
9. Karascheff, K. L. Neber der Verhalten der Langerhans 'schen Inseln des Pankreas bei diabetes mellitus. Deutsch. Arch. f. Klin. Med. 82 p. 60-1904-1905.
10. Hansemann, David. Die Beziehungen des Pankreas zum Diabetes—Ztschr. f. Klin. Med. 26 p. 191, 1894.
11. Naunyn, B.: Der Diabetes Mellitus Wien Holder, pp. 159-161, 1906.
12. Berger, Samuel S., Cohen, Milton B. and Selman, J. J., Liver Function tests: A comparative study of Five Methods in One Hundred Clinical cases. Jour. A. M. A., April 10, 1926.

DISCUSSION

DR. H. THIBAUT, Scott. There is just one thing that Dr. Watkins mentioned I would like to call to the attention of the Society. His paper, of course, is more or less a statistical one and doesn't offer very much room for discussion. But personally I never saw a case of cholecystitis at a time that I didn't think it was a late case; I mean, one that came to operation. I believe that we haven't yet entered that era where cholecystitis is treated surgically in the early stage of the disease, and it is probable that the surgical picture of cholecystitis will be changed as much in the next 15 or 20 years as that of appendicitis has in the past 15 or 20 years, because of the fact that we will learn enough about it to submit a great many of these patients to the surgeon in the early stages of the disease, which is impossible with our present knowledge of the case. At present all gall-bladder operations are late operations. With better knowledge of the cases they will be submitted to early operation in this disease instead of operating on a patient who has been debilitated by a long-standing chronic infection. (Applause).

DR. D. E. WHITE, El Dorado: I believe the doctor said that the mortality rate was four and a half times higher in a cholecystostomy than in a cholecystectomy. I was always of the opinion that it was just about opposite.

DR. WATKINS, in response: In looking up the results in other clinics of the relative mortality of cholecystostomy and cholecystectomy, we found that the mortality of the drainage operation is even higher than in this series, as high as 15 per cent, the reason being that the pathology is greater; sepsis is greater, infection is greater; in other words, toxemia is greater and the damage is greater when the resistance of the patient

is lowered. Cholecystostomy is done when there is some need for drainage of the biliary tract and the auxiliary tissues, such as the pancreas. Where we have an acute case of cholecystitis, whether it be suppurative, hydropic or neither, we have to drain. If we removed the gall-bladder, our patient would die. Our mortality would still be higher. When we do a cholecystectomy, we are operating at an interval, just as we have done with the appendix, and we try to do always with the appendix.

As to the mortality being four and a half times as great in a cholecystostomy as in a cholecystectomy, it is not the nature of the operation. Any one knows that drainage is much more simple; but it is the condition of the patient. We have gone through the same phase with the appendix.

The remarks of Dr. Thibault are pertinent. I am sure we will avoid a great deal of pathology in the future if we can diagnose our cases; if we can recognize them early and operate as soon as possible.

CHOLECYSTOGRAPHY*

By DARMON A. RHINEHART, M. D.
and
BARTON A. RHINEHART, M. D.
Little Rock

As far as is known the normal gall-bladder has two chief functions. In it, during fasting, bile received from the liver is concentrated to approximately eight times its original density. In all probability this is done by osmosis and diffusion of water from the bile into the lymphatics of the gall-bladder wall. The second function of the gall-bladder is the contraction of the feeble muscle bundles in its muscular coat and the intermittent discharge of this concentrated bile into the intestinal tract during digestion. Pathology in the wall of the gall-bladder, located chiefly in the muscular and serous coats, especially if chronic in nature, decreases or prevents the absorption of water by the gall-bladder and its contraction during digestion.

Excepting in very rare instances the normal gall-bladder cannot be shown on x-ray films. This is due to the similarity in density of the gall-bladder and its contents to the surrounding structures. If, however, an artificial increase in the density of the bile within the gall-bladder can be produced, enough of an x-ray beam will be absorbed to produce a distinct shadow on an x-ray film.

These facts have been used by Graham and his co-workers in the perfection of a clinical and experimental method of examining the gall-bladder with x-rays which they have

*Read at the 51st Annual Meeting of the Arkansas Medical Society, Hot Springs, May 18-20, 1926.

called "cholecystography." Early in their work they found that if any one of a number of substances, all some form of dye preparation, is injected intravenously, the substance excreted by the liver into the bile and concentrated in the gall-bladder, the necessary artificial increase in the density of the bile would be produced and the shadow of the gall-bladder appear on x-ray films. After considerable experimentation it was found that tetraiodo-phenolphthalein was the dye most suitable for this work, its iodine content providing the necessary opacity to x-rays.

The earliest work with these substances on human subjects was done by the intravenous administration of solutions of the dyes. Given in this way some patients experienced a distinct systemic reaction. Purification of the dye and improvements in the technique has, however, eliminated most of these reactions so that now in hospitals with an adequate house staff, the dye is best administered in this way.

These toxic reactions led investigators to seek for some other method of administration. It was found that if the dye were given in capsules with an enteric coating which passed through the acid gastric juice to be dissolved in the alkaline intestinal juices, it would be absorbed in the intestine and reach the liver and bile through the portal circulation. This is the method of administration that is now used in some hospitals and extensively in office practice.

Briefly stated, the technique of the examination is as follows: The night before the examination the patient is permitted a light supper at six o'clock. Beginning at 9 p. m. he is instructed to take the tetraiodophenolphthalein in capsules usually in three portions fifteen minutes apart. The amount varies from two to four grams, depending on the weight of the patient. To facilitate the passage of the capsules through the pylorus, the patient is instructed to lie on the right side as much as possible during the night.

The first examination is made the following morning at 9:00 or 10:00 o'clock, the patient fasting. At this time films are made until a satisfactory view of the gall-bladder is obtained or until good films of the entire gall-bladder region have been secured. If the gall-bladder is shown on these films the patient is instructed to eat a breakfast containing eggs and cream, fat having been shown to produce the maximum contraction of

the gall-bladder. Two hours later additional films are made to determine the contraction of the gall-bladder during digestion.

The drug given in this way occasionally produces some reaction. Nausea occurring from two to four o'clock in the morning is the most common. Sometimes the nausea is accompanied with vomiting. Two or three stools or an actual purgation, may occur. In rare instances the patients vomit up the capsules, or they may remain undissolved in the stomach or intestine. With each patient the examiner must assure himself that the dye has not been vomited or remains undissolved in the intestine. If it has not been absorbed the findings in the examination are of no value and the examination must be repeated.

On cholecystograms made in this way the normal gall-bladder will be shown as a distinct shadow of normal size and contour, in normal location and with a good concentration of bile. On films made after eating the shadow will either be entirely absent or reduced to from an eighth to a twelfth of its original volume.

If pathology exists in the gall-bladder, or if occlusion of the cystic or common duct is present, the gall-bladder shadow will be absent, decreased in density, abnormal in size, shape or location, or it will not contract normally after eating. Gall-stones containing calcium will be shown on such films even if the gall-bladder does not fill. Soft cholesterol stones will show as dark spots in the denser surrounding bile. Occasionally a patient will be found with a gall-bladder containing stones in which neither a shadow of the stones nor of the gall-bladder will be obtained. In these the diagnosis of pathology can be made, but the presence of stones will not be discovered.

Cholecystography, *is. per se*, a method of investigating the physiology of the gall-bladder, a diagnosis of pathology being made by inference when its normal physiological activity is absent or materially disturbed. It is now a recognized procedure in the examination of the gall-bladder for pathology. Although the preliminary report on this work was published but 27 months ago, the method has been adopted by all the leading hospitals and roentgenologists, and a voluminous literature on the subject has accumulated. Reports given in the literature give a high percentage of agreement between the x-ray findings and those of the surgeons at operation and by

pathologists from the study of excised tissue. Roentgenologists report an agreement varying from ninety to ninety-seven per cent.

We began this work eleven months ago, not only in our office practice, but in St. Vincent's Infirmary and the Little Rock General Hospital. At first it was used in conjunction with the direct examination of the gall-bladder region which we had practiced for several years. By its use to date we have examined 284 patients. Because of vomiting of the dye or failure of the capsules to dissolve, the findings was inconclusive in twenty. A diagnosis of disturbed function of the gall-bladder from pathology was made in 153 patients, the other 111 were reported as normal.

Of this number forty-seven have been operated on, thirty-eight in which our diagnosis of pathology was positive, and nine in which our report showed the presence of a normally functioning gall-bladder. There was an agreement between the x-ray and surgical findings in thirty-nine or eighty-three per cent, and a disagreement in eight or seventeen per cent. Six that we reported as pathological were reported normal by the operating surgeons, and two that we considered normal were reported pathological.

Of the six that were reported pathological by us, the operative records show the presence of adhesions around the gall-bladder in three, a slight thickening of the gall-bladder in one, no record of an examination of the gall-bladder in one, while the record of the sixth shows an attack of pain in the right hypochondriac region with fever, that was treated by ice-bags over the gall-bladder region before the patient left the hospital.

Of the two patients reported as having normal gall-bladders one was not operated on for nearly five months after the x-ray examination, but a thin-walled gall-bladder containing dark bile and gall stones was found at operation. The other patient was operated on the day following the x-ray examination. Our examination showed a normal gall-bladder that emptied itself completely in two hours after a meal, yet the next day the surgeon was unable to manually express its contents and drained it, a diversity of findings not as yet explained either to the satisfaction of the surgeon or us.

The presence of gall stones was correctly diagnosed six times and were missed twice when they were present.

Our experience and that of others is that in cholecystography we have a remarkably accurate method of determining the presence or absence of pathology in the gall-bladder. It offers a method of determining the presence of the disease early in its course and makes possible the institution of treatment before irreparable damage is done to the liver, pancreas and other structures.

DISCUSSION

DR. E. H. HUNT, Clarksville—This is a very interesting subject and while most of us are not studying x-ray work, I think we should not sit idly by and not recognize the fact that our x-ray men are doing this work which Dr. Graham started. It is gratifying to know that these men are following it up and getting such brilliant results.

DR. DON SMITH, Hope: I would like to know if Dr. Rhinehart has used this dye intravenously, and what were his objections to the intravenous use of it.

DR. G. A. HAYS, Texarkana—I am intensely interested in this method, because I think, with other roentgenologists, it is a revelation in gall-bladder work. I haven't had any experience with the oral procedure, so I cannot discuss that. All my work has been done in the hospital, and it is all intravenous, and I have so far seen no good reason to try the oral method. Yesterday Dr. Rhinehart gave me some new points. It can be done more easily in patients who are ambulatory, along with the gastric test and examination that may be done on the following day.

In a limited number of cases I have not had any reaction whatsoever aside from the fact that the patient complained of a fleeting sensation of loss of breath; really more a fear that there would be a loss of breath than an actual loss of breath. Assuming that was an anaphylactic reaction, I began giving 5 min. of adrenalin chlorid solution hypodermically just previous to the intravenous injection, and since that time I have not had any anaphylactic reactions.

I haven't had as many cases going to operation as the doctor has. I don't know whether that is because our surgeons don't believe as much as we do in this dye, or whether more of our patients refused operation. Those cases going to operation have confirmed the x-ray findings in every instance.

One interesting thing to me in this work is the number of sizes, shapes and positions of the gall-bladder. Up to the time this work was done, the roentgenologists generally looked for any suspicious shadow in a certain area. This work, showing the gall-bladders in various positions, proves, if it needed to be proven, that the old work was almost worthless. We find shadows now in other places than where the gall-bladder really is found to be with his method, which previously we would no doubt have diagnosed as indigestion, or maybe gall-stones.

I think this, that a new preparation that Drs. Graham and Cole have recently gotten out is going to help the surgeon more and the internist more to recognize more gall-bladder pathology than they have previously suspected.

I appreciated the doctor's paper very much, and I thank him for the pleasure I had in hearing it.

DR. RHINEHART, in response—I wish to thank Dr. Hays and Dr. Smith for their discussion and Dr. Hunt for his compliments.

Answering Dr. Smith's question, I will say that we have had no experience with the intravenous use of this dye. This work was so carefully controlled in the beginning that the intravenous use of the dye has been without fatal results. There have been some severe reactions reported, especially a fall in blood pressure, which is controlled by adrenalin. About the time we began this work there was a high percentage of such reactions being reported. Our results by the oral method have been so satisfactory that we have not changed.

Dr. Thibault, the other day, made a plea for the early diagnosis of cholecystitis. We think that, when this method of examination is perfected, we shall have a method of early diagnosis of cholecystitis. Usually the history of cholecystitis is that the disease goes on for years until a diagnosis of gall-bladder disease can be made from the clinical symptoms and history alone.

I am very much interested in this question. I am just as much interested in the treatment of it as I am in the diagnosis, although I am not doing any of the treating. I think it is up to our medical men to perfect some method of treatment of cholecystitis in young persons without recourse to surgery early in the disease.

THE RED CROSS CONTRIBUTION TO COMMUNITY HEALTH

Statistics of accomplishments of the American Red Cross in the past year indicate its increasing contribution to the health of the nation.

One of the most important phases of this work was carried on by Red Cross public health nurses, approximately 835 of whom were on duty with Chapters in various parts of the country, demonstrating and lecturing on care of the sick, especially in the home. Approximately 65,000 women and girls received such instruction this year.

A certain physician is quoted as having said that "one-third of what we eat keeps us alive, the other two-thirds keeps the doctor alive."

Regardless of whether this view is unanimous, the Red Cross, through instruction in nutrition is endeavoring to insure that everyone understands the relation of Food to health. More than 4,000 adults, and 114,000 children were taught this subject during the year, in schools and communities all over the country.

The development of this health program is in direct proportion to the strength of Red Cross membership, which is built up each year during Annual Roll Call, November 11th to 25th.

Abstracts

INFLUENCE OF UROLOGY ON LONGEVITY

B. A. Thomas, Philadelphia (Journal A. M. A., June 26, 1926), cites mortality and morbidity figures in support of his assertion that urology has been an important factor in the prolongation of life. The most potent force that has enabled urology to exert its influence on longevity, he says, has been its recognition as a specialty, whereby the public and the general practitioner have come to appreciate the significance and importance of certain symptoms and indications, and realize the value of prompt investigations and expert procedures. The present day cry of "overspecialization," he believes, is fraught with great danger, second only to the attempts to subjugate urology to general surgery. Two factors that are doing most and are destined to produce the greatest benefits in the future, so far as urology and its influence for humanity and longevity are concerned, are: first, fundamental, systematic, broad graduate instruction and training of would-be urologists, qualifying them for special major surgery, not merely cystoscopy and venerology; and, second, the creation in hospitals of special wards or departments for urologic surgery, with a personnel of residents, interns, nurses and orderlies trained and assigned, at least temporarily, solely to that specialty.

QUADRICEPS TEST FOR MYASTHENIA OF THYROIDISM

A test is described by Frank H. Lahey, Boston (Journal A. M. A., Sept. 4, 1926), which is said to be of considerable value in diagnosis of hyperthyroidism based on the well established weakness of the quadriceps femoris in this disease.

The patient sits well forward on the edge of a straight chair and holds the leg out at right angles to the body. In very few cases of thyroidism of any marked degree of intensity will it be impossible for one to maintain the leg in this position more than twenty-five or thirty seconds, while in the majority of cases not affected by thyroidism the leg can, with any real effort, be held in this position for approximately one minute.

THE JOURNAL

OF THE

ARKANSAS MEDICAL SOCIETY

Owned by the Arkansas Medical Society and Published under the direction of the Council.

WILLIAM R. BATHURST, Editor
810-812 Boyle Building, Little Rock, Arkansas.

Published Monthly. Subscription \$3.00 per year; single copies 25 cents.

Entered as sccond-class matter, June 21, 1906, at the postoffice at Little Rock, Arkansas, under the Act of Congress of March 3, 1879.

Acceptance for mailing at special rate of postage provided for in Section 1103, Act of October 3, 1917, authorized August 1, 1918.

The advertising policy of this Journal is governed by the rules of the Council on Pharmacy and Chemistry of the American Medical Association.

All communications of this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the State. Notice of deaths, removals from the state, changes of location, etc., are requested.

OFFICERS OF THE ARKANSAS MEDICAL SOCIETY	
J. M. LEMONS, President.....	Pine Bluff
HENRY THIBAUT, President-Elect.....	Scott
G. E. TARKINGTON, First Vice-President.....	Hot Springs
T. F. KITTRELL, Second Vice-President.....	Texarkana
J. H. FOWLER, Third Vice-President.....	Harrison
R. J. CALCOTE, Treasurer.....	Little Rock
WM. R. BATHURST, Secretary.....	Little Rock

COUNCILORS	
First District—THAD COTHERN.....	Jonesboro
Second District—J. L. JONES.....	Searcy
Third District—M. C. JOHN.....	Stuttgart
Fourth District—W. T. LOWE.....	Pine Bluff
Fifth District—W. P. COOKSEY.....	Magnolia
Sixth District—B. C. MIDDLETON.....	Texarkana
Seventh District—DEWELL GANN, SR.....	Benton
Eighth District—ANDERSON WATKINS.....	Little Rock
Ninth District—.....	
Tenth District—THOMAS DOUGLASS.....	Ozark

COMMITTEES	
SCIENTIFIC PROGRAM—R. J. Calcote, Little Rock, chairman; A. S. Buchanan, Prescott; R. H. T. Mann, Texarkana.	
SCIENTIFIC EXHIBIT—C. E. Oates, Little Rock, Chairman; Homer Scott, Little Rock; D. E. White, El Dorado.	
MEDICAL LEGISLATION—Earle H. Hunt, Clarksville, chairman; J. W. Walker, Fayetteville; Thad Cothern, Jonesboro.	
STUDENT LOAN FUND—E. F. Ellis, Fayetteville, chairman; J. H. Lenow, Little Rock; Wm. R. Bathurst, Little Rock; G. A. Warren, Black Rock.	
NECROLOGY—Cowley S. Pettus, Little Rock, Chairman; F. B. Kirby, Harrison; E. E. Barlow, Dermott.	
HEALTH AND PUBLIC INSTRUCTION—C. W. Garrison, Little Rock, chairman; F. Michael Smith, Pine Bluff; M. E. McCaskill, Little Rock; President and Secretary of State Society.	
CANCER CONTROL—Dewell Gann, Jr., Little Rock, chairman; John S. Jenkins, Pine Bluff; J. C. Hughes, Hoxie.	
INFANT WELFARE—A. C. Kirby, Little Rock, chairman; N. D. McCormack, Ft. Smith; H. W. Browning, Little Rock.	
HOSPITALS—J. D. Southard, Fort Smith, chairman; D. A. Rhinehart, Little Rock; J. T. Palmer, Pine Bluff.	

Editorial

DR. LEONIDAS KIRBY

Another of the Old Guard has fallen!

Cumbered by a deep realization of our great loss it is difficult to find suitable expression of our great sorrow and bereavement in the passing of one of nature's noblemen, whom to know was to love. One could not associate with him long without being influenced by the noble, courageous spirit that dominated his remarkable career. He was gentle, kind, considerate, untiring, patient and long suffering in every good word and work.

The 23rd chapter of Proverbs, 7th verse, reads: "For as he thinketh in his heart, so is he." Men may make mistakes, the individual may not understand his own motives; but deep in the inner recess of his being is the real man. As he thinketh in his heart, life is the response to that which in that inner shrine gives impetus to every act.

How wonderful a life was that of Dr. Kirby, replete with service, full of hard work and disagreeable tasks in his line of duty. There was no shrinking from the responsibilities that try one's skill and judgment; no escape from personal and professional obligations. His was a life well and bravely lived.

Fifty years of arduous practice in the country districts, the long nights, the strenuous days of exposure, the irregular hours, the sacrifice of health and comfort. In his daily routine he faced many an act of heroism and met and solved many problems of self-denial.

What a glorious consummation of his life of service, to feel the coming of old age with its stealing steps, to sense the approach of the golden sunset ferry and to be able to say truthfully and whole-heartedly in responding to the last call, "I have fought a good fight; I have kept the faith!" There was no moaning of the bar when this faithful soul put out to sea.

May we, his comrades in the profession of his choosing, achieve such a glorious finale of a well-spent life. We shall not soon see his like again.

"So fades the summer cloud away;
So sinks the gale when storms are o'er;
So gently shuts the eye of day;
So dies a wave along the shore."

Abstracts

FUNCTION OF LIVER IN RELATION TO OPERATION ON GALL-BLADDER AND DUCTS

G. W. Crile, Cleveland (Journal A. M. A., July 31, 1926), and his associates have records of 1,682 operations on the gall-bladder, including 786 in which drainage was done and 740 excisions of the gall-bladder. On the whole, the end results in cases in which drainage was done have not been as satisfactory as the end results in the cases in which the gall-bladder was excised. On the other hand, if the immediate mortality and end results of a series in which excision was done in every case regardless of age, physical state, general health, the presence of an acute infection, the existence of complicating diseases, obesity, high blood pressure, respiratory diseases, cardiorenal diseases, diabetes, etc., could be compared with the immediate mortality and end results of a similar series in which only drainage was done, the difference would not be marked. A cholecystectomy in every case, regardless of the local or the general condition, would inevitably show a higher immediate mortality, but better end results than would follow drainage under the same conditions. It seems paradoxical, but it is a fact, that cholecystectomy is safest when the indication for it is least clear. Drainage is safer when the general hazard is most clearly defined. It follows, therefore, that the surgeon must weigh every factor with meticulous accuracy. As for the technic of the cholecystectomy, that, like the choice of the operation itself, can be governed by no fixed rule, except that, in view of a fundamental conception of the importance of liver function, liver function must be conserved. This is accomplished directly by ample exposure, bloodless dissection, clear vision, minimum trauma, minimum anesthesia, optimum temperature; and indirectly by the conservation of the patient's resources as a whole. If the field is amply exposed, if the tissues are never blood stained, if the dissection is sharp, if every important structure, namely, the common duct, the cystic duct, the base of the gall-bladder, the cystic artery, are clearly seen and are definitely

identified, then it matters little how the gall-bladder is removed, although in many instances the gall-bladder is best removed from below upward, since the blood vessels may thus be secured earlier and a somewhat drier field maintained. When the excision of the gall-bladder is made from above downward, hemorrhage is best controlled by compressing not crushing—the base of the gall-bladder, including the arteries, with curved forceps, care being taken to avoid the common and hepatic ducts. This approach from above downward is the easiest route to a clear exposure of the arteries and cystic duct, and if the field is handled carefully there is no possibility of injuring the common duct and hepatic vessels. Whichever direction is followed, as clear a dissection of every structure must be made as in an operation for hernia. No accident can happen if the following prime factors are assured: a wide opening through Moynihan's paramedian incision; relaxation of the abdominal walls by regional block; bloodless dissection, and wide exposure of the field by means of the Deaver retractors. By experimental researches in the biophysical laboratories of the Cleveland Clinic, it has been found that the introduction of heat within the abdomen causes an immediate rise not only in the temperature of the liver, but also in the temperature of the brain, the rise in the temperature of the brain occurring synchronously with the change in the temperature of the liver. It would follow from this observation that the application of heat to the liver should in a large part counteract the effect of operations on the liver and bile ducts. As a result of their interpretation of this experimental fact, Crile has been applying heat to the liver by means of diathermy, which is an ideal method of holding the temperature of the liver at a normal level. One plate of the diathermy apparatus is placed on the lower chest on one side and the other is brought opposite the dome of the liver. The current can thus be continually applied during the operation, and the temperature of the liver and the abdominal viscera can be maintained at or above the normal throughout the operation, regardless of the exposure of the intestines; moreover, the application of the diathermy current during the immediate post-operative hours is of great aid in carrying the patient through that critical period.

LOCALIZATION IN ANIMALS OF BACTERIA ISOLATED FROM FOCI OF INFECTION

With the hope of adding something of corroborative value to the experimental work on elective localization, Allen C. Nickel, Rochester, Minn. (Journal A. M. A., Oct. 2, 1926), reports on some of his experiments in the last eighteen months with four of the more important foci; the tooth, the tonsil, the prostate and the cervix. With 149 cultures from cases of arthritis, 328 rabbits were injected. Arthritis of one or more joints was obtained with cultures from the tonsils in 50 per cent from the teeth in 60 per cent, from the prostate in 35 per cent, and from the cervix in 35 per cent, an average of 51 per cent of all the animals injected. Simultaneously, there were lesions of the heart, muscle and liver in 3 per cent of the animals, of the eye in 1 per cent, of the lung, gall-bladder and kidney in 2 per cent, and of the stomach and duodenum in 5 per cent. Arthritis occurred in 18 per cent of the cases of myocarditis and in 11 per cent of the cases of myositis, diseases that are often associated with arthritis, in contrast to 7 per cent of the control group. Similarly, a relatively high incidence of specific localization occurred in each of the groups studied. Thus, in eleven cases of myocarditis and endocarditis, lesions of the heart occurred in 39 per cent of the animals injected, in contrast to 3 per cent of the control animals. In twelve cases of myositis, lesions of the muscles occurred in 38 per cent of the animals, as contrasted with 5 per cent in the control animals. In thirty-six cases of diseases of the eye, 34 per cent of the animals had lesions of the eye, as contrasted with 1 per cent in the control animals. In eight cases of lesions of the skin, 36 per cent of the animals had lesions in contrast to 1 per cent of the control animals, and in sixty-one cases of peptic and duodenal ulcer 40 per cent of the animals developed lesions of the stomach or duodenum, in contrast to 3 per cent of the control animals. Nickel asserts that aside from injury fatigue, and so forth, the inherent property of bacteria to localize electively in certain tissues determines largely the site of the disease in persons harboring foci of infection. This holds true, not only for strains isolated in acute but also in chronic diseases; and advanced changes, such as occur in chronic arthritis, have been produced experimentally, exacerbations occurring repeatedly following

injection. Causal relationship between the organisms and the lesions produced was established through isolation of the former from the lesions when the blood and other tissues proved sterile, and by their demonstration in sections. The method of estimating the localizing power in animals of organisms isolated from foci of infection has diagnostic as well as therapeutic value. It often serves to demonstrate which of a series of organisms commonly found in foci bears causal relationship to the systemic disease and what particular focus harbors such an organism, and it provides the means for active immunization with specific autogenous vaccines.

County Societies

BOONE COUNTY

(Reported by D. L. OWENS, Secretary)

The Boone County Medical Society met in Harrison, July 13th.

Members present: Floyd, Owens, Gladden, Poynor, L. Kirby, Sims, Brand, Blackwood, Routh, Wallace, McFerrin, McCurry, Jackson, J. H. Fowler, T. P. Fowler. Visitors: F. W. Carruthers, Little Rock; E. E. Roberts, Gilbert, and W. T. Moore, Everton.

The meeting was held on the 13th instead of the 6th, in order that Dr. Carruthers could be with the Society. The object sought was that all orthopedic cases in the county that desired advice about their condition and the course they should pursue, might be examined by an expert. About fifty clinical cases were presented. All members present derived great benefit from this clinic, and the Society extend its thanks to Dr. Carruthers for his help and advice given at this meeting.

At 8:00 p. m. a banquet was enjoyed by the members.

The regular August meeting was held the third.

Present: Floyd, Owens, L. Kirby, Routh, J. H. Fowler and Gladden. W. T. Moore, Everton, was a guest.

A very interesting case of pellagra was reported by Dr. J. H. Fowler.

Dr. L. Kirby reported an interesting case, which was diagnosed as "Chronic Infective Cirrhosis of Liver" with Treatment of the Case.

Other cases reported were by Drs. Gladden and Floyd. They brought the patients before the Society to be used as clinical cases.

On August 20th, a special meeting was called following the death of our beloved member, Dr. Leonidas Kirby.

Present: Jackson, Owens, J. H. Fowler, T. P. Fowler, Poynor and Blackwood.

The following committees were appointed:

Committee on Resolutions: J. H. Fowler, W. H. Poynor, and J. C. Blackwood.

Committee on Floral Offerings: T. P. Fowler, C. M. Routh and Jno. Wallace.

September 7, regular monthly meeting.

Present: Floyd, Owens, Poynor, Johnson, J. H. Fowler.

A very interesting case of "Pulmonary Tuberculosis" was presented as a clinic by Dr. G. W. Floyd, which brought forth an interesting discussion.

Dr. J. H. Fowler reported a case of "Intestinal Obstruction," which was interesting from several points, and in conjunction with his report he read a paper on the subject.

The Committee on Resolutions gave their report and presented a copy of same to the secretary to be spread on the minutes of the Society, and requested that a copy be sent to the Journal for publication.

A motion was made and seconded that a copy of the resolutions be sent to each member of the bereaved family of Dr. Kirby.

RESOLUTIONS OF RESPECT

The following resolutions were adopted by a committee from the Boone County Medical Society following the death of Dr. Leonidas Kirby who was a life-time member of the Society.

Whereas, God in his infinite wisdom has seen fit to call from our midst, Dr. Leonidas Kirby, one of our most beloved and useful physicians, whose memory we shall ever cherish, and

Whereas, Dr. Leonidas Kirby has been the leading physician and surgeon of Boone County for many years, having practiced in Harrison for more than fifty years, and at times being called many miles in consultation or to perform a surgical operation which required unusual skill and ability and,

Whereas, no man, in our opinion has been more faithful to his profession than Dr. Kirby. He has come the nearest giving his entire time to the medical profession of any person of whom we have any knowledge. He has given a life of service, and such service has rendered his name famous, not only among the people of Boone County, but throughout the State of Arkansas, and

Whereas, Dr. Kirby's faithful attendance to Boone County Medical Society meetings, the valuable papers he has read, the fatherly counsel he has given will all be greatly missed by the entire Society. We cannot express in words our appreciation for the services he has rendered and the love and respect we had for him. In his passing, we have suffered an irreparable loss.

Therefore be it Resolved that the Boone County Medical Society offer our deepest condolence to his wife, and family in their great sorrow and that a copy of these resolutions be spread on the minutes of the Boone County Medical Society, a copy sent to his family and a copy furnished local papers and the Journal of the Arkansas Medical Society.

J. H. FOWLER,
W. H. POYNOR,
J. C. BLACKWOOD,
Committee.

The committee appointed by Chairman Cothorn on behalf of the Council to draft resolutions on the death of Dr. Leonidas Kirby, submits the following report:

Whereas, in the death of Dr. Leonidas Kirby the Council has lost a courageous and faithful member. No man has labored more zealously than he to promote in every way, the welfare of the Arkansas Medical Society. His courage, zeal, optimism, cheerfulness and kindly sympathy have always been manifest. It was at all times a pleasure to meet with him and to be engaged with him in any work. He was a man of high ideals, professional honor and strong common sense. We miss him profoundly and regret his loss deeply, and

Whereas, we shall ever hold him in loving remembrance, and the memory of his excellent traits of character will ever be to us a stimulus to good work. The life of a man like Dr. Kirby makes one glad to be a member of the noble profession, chosen by him, and to strive according to one's best for its high ideals.

Now, Therefore, be it Resolved, that these resolutions be spread on the Minutes of the Council and that a copy be sent to the bereaved family of our fallen comrade, and that the same be published in the Journal of the Arkansas Medical Society.

DEWELL GANN, Sr.,
J. L. JONES,
THOS. DOUGLASS,
Committee.

Obituary

BROOKSHER, SAMUEL L.—Dr. S. L. Brooksher, formerly of Fort Smith, died at Yellville, July 12 1926, of myocarditis, aged 58 years. He had been in failing health since January, 1926. Interment was at Yellville, the family home.

RICE, THOS. M.—Dr. T. M. Riee of Avoca passed away in a hospital at Hot Springs National Park, July 23, 1926. He was born in Riceville, Tenn., July 12, 1855, and came, with his parents, in 1859, and located on Pea Ridge, near Elk Horn Tavern, Arkansas. He grew to manhood there, working on the farm, going to school, teaching school and attending medical lectures in St. Louis, graduating from the old Missouri Medical School, April, 1876. He immediately opened an office at Brightwater, Ark., and began administering to distressed and suffering humanity by practicing his own selected profession.

Realizing the necessity for a companion through life, he was united in marriage to Miss Amelia Johnson, and to this union were born three children, two of whom preceded their father to his grave. After a post-graduate course in St. Louis in 1892, Dr. Riee returned to Benton County, and continued his laborious, faithful and efficient duties for the remainder of half a century.

He was generous and broad in his views, believing in the principles of democracy, Masonry, organized medicine and of Christianity, upon which his hopes were founded more than fifty years ago.

Beside his wife and son, there are six brothers and many other relatives to mourn his loss, and with these relatives, a host of friends paid the last tribute of respect by assembling at Buttram Chapel Cemetery with a profuse floral offering.

Personal and News Items

Dr. W. H. DeClark of Little Rock has removed to McGehee.

Dr. Geo. S. Brown, Conway, has returned from a visit to the Mayo Clinics.

Dr. and Mrs. O. H. King, Hot Springs, left September 28 to spend several weeks in eastern points.

Dr. H. A. Cheatham of Princeton and Dr. J. P. Sheriff of Legels, were recent visitors to Little Rock.

The Travel Study Club of American Physicians, at the completion of its recent European Study Tour, elected Dr. Fred H. Albee of New York as President, Drs. Edward B. Heekel of Pittsburg and John P. Lord of Omaha as Vice-Presidents and Dr. Richard Kovaes of New York as Secretary. Plans are being prepared for the next study trip, including the Central European countries: Germany, Austria, Czechoslovakia, Hungary and Italy.

Dr. E. C. Hunt, formerly of Russellville, is now located at Harmony.

The Crawford County Medical Society met in regular session Thursday, September 23d, at 11:00 a. m., in the K. P. Hall in Van Buren. Essayists for the meeting were: Drs. D. W. Goldstein, M. S. Dibrell and H. W. Savery.

Dr. C. S. Williamson of the Mayo Surgical Clinic, has located in Little Rock and with his family will reside at 16th and Spring Streets. He has secured offices in the Urquhart Building.

Dr. Wm. E. Jones of Little Rock has returned from a trip to the Northwest and a sojourn at the Mayo Clinics.

WANTED—Salaried appointments for Class A physicians in all branches of the medical profession. Let us put you in touch with the best man for your opening. Our nation-wide connections enable us to give superior service. Aznoe's National Physicians' Exchange, 30 North Michigan, Chicago. Established 1896. Member the Chicago Association of Commerce.—(Adv.)

Dr. Paul L. Mahoney is attending the Chicago Clinics. From there he will proceed to the meeting of the American College of Surgeons, Montreal, October 19-25, where he expects to be made a Fellow. Last year Dr. Mahoney received his degree from the American Society of Oto-Laryngologists.

Dr. R. A. Law, formerly member of the Staff of the State Hospital for Nervous Diseases, has been appointed pathologist of the Shipp-Bond Clinic, Little Rock.

Dr. J. E. Coleman, formerly of Stuttgart, has moved from Chester, S. C., to Laurinburg, N. C.

Dr. C. J. Carter, has moved from El Dorado to Pampa, Texas.

Dr. S. A. Lowery of Luxora has moved to Kings Mountain, N. C.

Dr. T. B. Bradford has moved from Brinkley to Toone, Tenn.

SECOND COUNCILOR DISTRICT MEDICAL SOCIETY

The Second Councilor District Medical Society met at the Court House in Batesville, September 13, 1926, 7:30 P. M. M. S. Craig presiding.

The physicians were entertained by members of the Independence County Medical Society at a dinner served at the Arlington Hotel.

Present: J. L. Jones, Councilor, Sam J. Allbright, Searcy; G. T. Burge, Judsonia; K. K. Kimberlin, O. A. Jamison, Tuckerman; H. B. Hull, Mammoth Springs; O. S. Woods, Salem; T. J. Woods, E. M. Gray, Evening Shade; K. W. King, Salado; S. N. Robertson, Sulphur Rock; V. D. McAdams, Cord; M. S. Craig, F. A. Gray, W. B. Lawrence, C. G. Hinkle, O. J. T. Johnston, T. N. Rodman, L. T. Evans, Batesville.

Visitors: W. D. Rose, P. L. Mahoney, Little Rock; Graham Street, McAlester, Oklahoma; Earl Best, Denver, Colorado.

The following papers were read and discussed:

"The Diagnostic Possibilities of Intra-Abdominal Disease"—W. D. Rose, Little Rock.

"Pituitrin in Obstetrics"—V. D. McAdams, Cord.

"Injuries of the Eyeball"—P. L. Mahoney, Little Rock.

"Diabetes Mellitus"—E. M. Gray, Evening Shade.

"Orbital Abscess"—C. G. Hinkle, Batesville.

"Gastritis"—O. S. Woods, Salem.

"Medical Ethics"—S. J. Allbright, Searcy.

The Society unanimously voted their thanks for the papers presented by Dr. Rose and Dr. Mahoney.

The Society adjourned to meet the second Monday night in April, 1927, at Searcy.

Abstracts

CIRCULATORY TONICS VERSUS CIRCULATORY DEPRESSANTS

Using the blood pressure readings as the motor expression of the circulatory apparatus in physiologic action, Clarence L. Andrews, Atlantic City, N. J. (Journal A. M. A., Sept. 18, 1926), has worked out the following groupings: (1) Hypertension without apparent cause, with diastolic pressure less than 100, as reported by Dr. Riesman of Philadelphia, which occurs in women about the menopause and which tends to right itself as the menopausal symptoms are alleviated. (2) Hypertension with a well sustained systolic pressure with a diastolic above 110, and whose diastolic falls to 100 or less and the systolic also falls, when rest and eliminative treatment are carried out. (3) Hypertension with a well sustained systolic pressure and a diastolic above 110, whose systolic falls under rest and eliminative treatment, but whose diastolic remains at or above 110. (4) Hypertension with a systolic pressure not well sustained as the pressure is taken, with a diastolic about 110, both of which come down under rest and eliminative treatment, but whose systolic begins to vacillate again following slight physical exertion and the diastolic goes back to about 110. (5) Hypertension with systolic pressure well sustained and with diastolic below 100, usually found in highly neurotic persons of both sexes and which responds very little to any form of treatment, but remains high in spite of all one can do. Group 1 represents a type of case that will usually take care of itself and should give no special concern. The patients in group 2 evidently had a hypertension due to a toxic basis, which returned to within the normal when the bowels and kidney eliminated freely. Group 3 seems to show a definite increase in peripheral resistance due to real changes in the cardiovas-

cular apparatus. Group 4 is encountered in that type of patient with slightly hypertrophy and dilatation, with a resultant poorly toned up heart muscle that needs support to increase its tone. Group 5 has some yet unexplained cause for the hypertension, which does not respond to treatment, and most probably has some endocrine imbalance as its background. Andrews emphasized the fact that tonic doses of digitalis should be given in hypertensive cases of long standing to support the heart muscle. Patients with hypertension of long standing do better if the blood pressure is not lowered too much.

SANITARY OFFICER AND COUNTY HEALTH WORK

E. L. Bishop, Nashville, Tenn. (Journal A. M. A., Aug. 28, 1926), points out that rural health work has two basic differences from urban health work. Personal relationships in rural health work are more intimate, the health worker being subjected to much closer scrutiny than is the case with urban workers. The second difference is concerned with finance. In the first place, the assessed valuation of rural areas is lower than is the case with cities, and, in addition, appropriating bodies of rural governments have not yet begun the appropriation of very large sums per capita for the protection and promotion of the public health. In a study of eighty-eight full-time county health organizations in operation throughout 1925, and serving nearly four million people, it has been shown that the total budgets represented a per capita tax of 32.4 cents. It is fair to assume that expenditures from county funds do not exceed three-fourths of the total budgets. In the selection of counties for full-time county health departments, we have usually thought of 50 cents per capita as being a suitable expenditure; a budget of \$10,000 per annum as the desirable budget for a unit of four persons and a county of approximately 20,000 persons as a suitable unit for operations. If adequate protection of the public health is essentially concerned with personal relationships, obviously some form of full-time health service must be provided for each political unit of government, as the unit of health organization, though this need not mean that all the personnel of a unit of health organization must confine its activity to an individual political unit of government. Faced with the necessity for providing this service, and at the same time confronted with the difficulties of financing rural

health work, what, then, is the solution for the rural Southern county of less than 20,000? In some areas, considerable advance has been made by use of the public health nurse in the development of a local program, the principal parts of which are concerned with that phase of preventive medicine commonly termed personal hygiene. In some other areas, it has seemed proper to begin with the environmental sanitation phase of the local health program, with the sanitary officer considered as the logical agent. The latter plan has several advantages, adapting it for use in many Southern counties. In the first place, it deals with some of the fundamentals of rural health work, since the sanitary officer may devote most of his activity to the prevention of soil pollution, protection of water supplies, and certain parts of a malaria control program. Adequate supervision, under a well trained personnel, is a prime essential to success, for without such supervision there will be a surer tendency to degeneration of the program into inefficient activity, than will be the case with county health departments. In addition, financial co-operation by the State is necessary.



D-ZERTA is especially recommended for the diet in diabetic and obesity cases. It fills the need for a dessert, appetizing in appearance, appealing in aroma, agreeable to the taste, yet containing *no* sugar. Made of purest gelatin, saccharin, tartaric acid and vegetable coloring.

20 SERVINGS—\$1.00

Assorted flavors in each package

THE JELL-O COMPANY, Inc.

Le Roy, N. Y.

Bridgeburg, Can.

D-Zerta
A Sugar-free Dessert

SALASCO SANITARIUM SCHOOL



A private school for a limited number of nervous and retarded children in the suburbs of Little Rock.

A handsome modern home with every convenience of the city, is located on a tract of forty acres, comprising lawns, gardens, orchards, playgrounds and groves of beau-

tiful native trees. An ideal situation, secluded, but easily reached by splendid hard-surfaced highway.

Special attention is given to corrective physical work, motor control, habit training and speech. Also facilities for the instruction of certain types of children with impaired sight.

R. F. DARNALL, M. D.
Founder and Superintendent

MISS W. M. BREWER
Educational Director

CITY OFFICE: 508 Federal Bank Building
LITTLE ROCK, ARKANSAS

D. A. Rhinehart, A. M., M. D.
B. A. Rhinehart, A. B., M. D.

DRS. RHINEHART AND
RHINEHART

Roentgenologists
Clinical Pathologists

Telephone 4-0741
801-2-3-4 New Donaghey Building
LITTLE ROCK, ARK.

Prevention! Cleanliness!

Samples
Sent on
Request



Physicians
May Prescribe
With Own
Label

Reg. U. S. Pat. Office

Pemco Menthol
Eucalyptus Compound
Nasal Spray

Gently cleanses the nasal passages, helping to prevent colds and infection.

In dry catarrh, it relieves by increasing the moisture and lessening the crusts.

Sinus trouble may be greatly helped and often avoided by using a spray solution which reduces the swelling of the turbinate bodies and allows the sinuses to drain naturally.

In Ozaena it is of great advantage in helping to control the odor.

In one, two and eight ounce bottles.

We supply EPINEPHRIN CHLORIDE 1:1000
U. S. P. Natural—optically Levo-rotatory.

PROPHYLACTO MFG. CO.

(Not Inc.)

227 West Erie Street, Chicago

THE JOURNAL

OF THE

Arkansas Medical Society

PUBLISHED MONTHLY UNDER THE DIRECTION OF THE COUNCIL

Vol. XXIII

LITTLE ROCK, ARK., NOVEMBER, 1926

No. 6

Original Articles

CERVICAL INFECTIONS*

J. P. DELANEY, M. D., Little Rock

At first thought, a paper on this subject might be considered to be rather elementary. However, because of its high incidence, frequency of complications and its importance in relation to the general health, I believe that a brief review of the present state of our knowledge and treatment should be of sufficient importance to invoke a general discussion, which after all, is the most important part of a medical paper.

The vagina and cervix normally possess a secretion, mucous in character, sufficient to keep the parts moist. This is increased during pregnancy, menstruation, and in the presence of some general systemic diseases such as heart disease and any condition favoring pelvic congestion.

DEFINITION :

Any persistent increase in the amount and change in character of this secretion can be termed leucorrhea. Ruling out the cases caused by extra genital causes, leucorrhea is pathological, and an expression of underlying pathology, the result of infection or infection plus trauma such as follows labor, abortion, etc. And the focus of infection is in most cases in the cervix. Persistent infection also occurs and is found in Skene's ducts of the urethra and Bartholin's ducts and glands of the vagina.

BACTERIOLOGY :

The organisms usually found in the order of their frequency are first, gonococcus, staphylococcus, streptococcus and the colon bacillus. The laboratory findings, except in acute conditions, are usually negative for G. C., but are usually positive for pus cells and other

pyogenic organisms. In the majority of cases the causative organism is the gonococcus.

THE HISTORY :

The history as given varies from slight, if any, symptoms to that of an acute infection. In married women, it is often the result of infection by the husband, who thought he was cured of gonorrhoea; had developed sufficient resistance to his infection to be symptom free, and yet the organisms present in his prostate were sufficiently virulent to produce a mild but definite infection in the new host.

SYMPTOMS :

In addition to the discharge, we have dysmenorrhea, headache, backache, nervousness, debility and occasionally severe lumbo-sacral pain. Occasionally patients have joint pains of an arthritic nature. The discharge varies in amount and character from a mucous to a muco-purulent, and occasionally it is frankly purulent in character. There can be, however, considerable cervical infection with but a mild leucorrhea.

PHYSICAL EXAMINATION :

A complete physical examination should, of course, be made of every patient. The local examination includes a careful search for infection in Skene's and Bartholin's ducts. Skene's ducts can be averted and milked out and pus can often be demonstrated. The presence of a red macular spot around the opening of Bartholin's duct in the vagina is considered to be evidence of previous infection. The gland itself is occasionally chronically infected. The appearance of the infected cervix is familiar to us all.

MORBID ANATOMY :

A brief description of the morbid anatomy and pathology present will serve to indicate the treatment and explain in part the failure of purely local drug treatment, douches, etc. The normal cervix is covered with stratified epithelium, the same as the vagina, and which has a high resistance to infection. The cer-

*Read at the 51st Annual Meeting of the Arkansas Medical Society, Hot Springs, May 18-20, 1926.

vical canal is lined with columnar epithelium, which is not so resistant and for which the gonococcus has a selective affinity. In response to infection or infection plus trauma, the mucosa swells, stimulating glandular proliferation of the columnar epithelium of the cervical canal, which pushes out of the os producing the typical erosion or cervical ulcer. This is really an overgrowth of lymphoid tissue, with an orderly arrangement of the cells; but which may, however, by long stimulation in response to chronic infection become malignant. As a result of this new growth and increased size and weight of the cervix, circulatory stasis is produced, chronic congestion occurs with resulting hyper-secretion of the mucous glands. In time the ducts of the glands are occluded, producing retention cysts and giving us a large soggy, soft cervix, which occasionally bleeds. Remembering that these changes are all caused by infection, if the condition could be confined to cervix itself, the outlook would be favorable, but because of the rich lymphatic supply of the cervix, by an ascending lymphangitis, the infection is carried upward to the utero-sacral ligaments, broad ligaments and by direct upward extension to the uterus itself, the tubes, ovaries and peritoneum are all involved and we have a chronic pelvic cellulitis. As previously mentioned, upward extension to the body of the uterus is by an ascending lymphangitis between the muscle fibers of the uterus. We have, in response to this infection, a tissue reaction similar to that of the cervix. Circulatory interference and stasis occurs, which prevents normal uterine contractions and drainage, resulting finally in metritis and parametritis. Occasionally we find a case with adnexal disease and other pelvic inflammatory changes with very little if any apparent pathology in the cervix, and slight if any leucorrhea.

There are four ways for the tubes and adnexia to become involved:

1. By direct blood stream infection.
2. By direct extension through open fimbria of the tubes, such as would occur in peritonitis or appendicitis.
3. By the lymphatics as previously described.
4. By direct upward extension through the uterine canal.

In the majority of cases, the pelvic pathology is secondary to the infection in the cervix.

TREATMENT:

It is obvious that every patient presenting herself for treatment of leucorrhea should have the benefit of a thorough physical examination. Foci of infection, if found elsewhere in the body, should of course, be taken care of. Such general measures as rest, diet, bathing, tonics, etc., as would tend to build up the general health should be instituted. If married, it is important that the husband should be examined and treated, if infection be found, as the male prostate can and does harbor infection, and the wife may be constantly re-infected. These things being looked for and taken care of, direct attack on the cervix itself may be planned.

Infection persists in Skene's ducts of urethra and Bartholin's ducts and glands of vagina. The ducts can be exposed and either injected or, if this be impossible, it can be split and cauterized either by electricity or carbolic acid. Bartholin's duct can be injected, and if there be evidence of chronic infection of the gland itself, it is best to dissect out the gland and obliterate the ducts.

Purely local treatment of the cervix itself by drugs, locally applied, is a delusion and a snare. The greatest single agent we have at this time is heat, both by diathermy and the actual cautery. Diathermy is based on the principle of generating heat within the tissues by the resistance of the tissues themselves to the passage of an electric current. Corbus and many others in this field of work are reporting wonderful results. I have had no personal experience with diathermy, but have been using the cautery. The fear of cervical stenosis following the cautery must not be overlooked. You get a sufficient degree of heat to kill the infection, the sloughing of the burnt tissues gives you drainage. A light dilatation and curetage should follow the use of the cautery. Four applications are made introducing the cautery cold, turning on the heat and burning a narrow strip as the cautery is withdrawn. Four such strips are burnt.

The Sturmdorf operation removes a small cone-shaped piece of cervical tissue and covers over the denuded area with vaginal mucosa. If all the infected gland-bearing tissue be removed, the excision may extend to the internal os, and the operation then becomes a high amputation of the cervix. If all infected tissue be not removed, of course, the result will be disappointing, but usually the operation gives very satisfactory results.

ELECTRO COAGULATION OF CERVIX.

Dr. Sterling Bond's Technique of the Sturmdorf operation is as follows:

Patient is given condensation handle to hold instead of the usual moist pad on the back, and a long smooth insulated hat pin is used for the other point.

Patient is placed in the lithotomy position and bi-valve speculum is used and needle is inserted to desired depth into the cervix. Current is turned on until blanching of tissues occurs. Current turned off and hat pin removed to another area. Occasionally patient will complain of undue warmth and all that is necessary is for the hat pin to be moved to another area. There is usually one sensitive spot in the anterior lip about the center. If this is painful under coagulation all that is necessary is that the point be moved one-eighth to one-quarter inch.

There are three advantages to this method; First, In contrast with the use of the actual cautery, which leaves a line of coagulation at the point of contact, with a resulting drainage into the ascending lymphatics, the latter method forms the line of coagulation above the infected area, thus causing a drainage into the vagina instead of into the ascending lymphatics; Second, as much of the cervix can be removed as is necessary, and Third, there is a lack of hemorrhage.

If there should be an oozing at the time of coagulation, this point may be touched with the oudin or dry spark. Any hemorrhage which may occur at the time of separation of slough is controlled with 5 c. c. of the patient's own blood injected intramuscularly. In no case so far have we been obliged to pack.

There is beside the blocking of lymphatics with the line of coagulation, the additional value of sterilization by heat.

Vaccine therapy combined with the usual local and general measures, occasionally seems to give benefit, the non-specific protein milk injections I believe to be of distinct benefit.

The continuous tub douche in addition to vaccines and local applications of mercurchrome 20 per cent will take care of mild infections if seen early. The treatment is that of the local plus the associated pelvic pathology. To thoroughly eradicate the infection, laparotomy is sometimes necessary. As when the patient is first seen, the general pelvic condition may overshadow the cervical. Cure of the cervical infection will relieve to a large extent the pelvic cellulitis and congestion, and

if there be no extensive pelvic pathology, will give relief of the lumbo-sacral backache and many of the general systemic disturbances caused by this infection.

PROGNOSIS:

The prognosis is governed by the extent of the associated pelvic pathology, and as in other infections by the individual resistance and condition of the patient.

SUMMARY:

The cervix as a focus of infection affecting the general health has the same importance as infected tonsils or teeth.

The leucorrhea is but a symptom of infection, which is usually in the cervix.

In a small but definite percentage of cases, malignancy develops in the chronic infected cervix.

Early and energetic treatment should be instituted in every case to prevent damage to pelvic structures and the patient's general health.

REFERENCES:

My thanks are due Dr. Dewell Gann, Jr., for his criticisms and to Dr. Sterling Bond for his technique of Electric Coagulation of the Cervix.

Crossen: Diseases of Women.

Polak: Pelvic Inflammation.

DISCUSSION

DR. H. D. WOOD, Fayetteville: Dr. Delaney said something that I can't quite agree with. He said the application of drugs was a snare and a delusion.

When he started in to read this paper, it reminded me of something that occurred in my practice almost 53 years ago. I was asked to see a young lady who had been bed-ridden quite a while. She was a well-developed, well-grown young lady, and when I went in to see her I inquired into the history of the case, and the only evidence that I could find of trouble was that she was having such a very great leucorrheal discharge. Of course, I thought of the ordinary infection that caused these things, but the girl's life was above reproach, I thought, from what I could learn, and yet the yellowish discharge made one suspicious. So, I told her I would come back and see her and see if we could find out what her trouble was. I went back the next day and found that she had a chronic cervicitis producing an enormous discharge, that had weakened the poor girl until she was practically an invalid. I took nitrate of silver and nitrate of potash in equal parts and melted them in a test tube, and with a silver probe I put a ball of the compound mixture of the melted silver nitrate and nitrate of potash on it and I made an application to that cervix well up the cervical canal and kept that up for quite a while. The discharge ceased, the girl got out of her trouble, she put on flesh and

later married a man and not long afterwards she became a mother, and got along without any trouble.

So that when you tell us that any medical application is a snare and a delusion, I can't quite agree with the essayist. (Applause).

DR. H. THIBAUT, Scotts: Dr. Delaney's paper suggested two things to me. There was a man who once said that humanity would have been better off if the hypodermic syringe hadn't been invented, because there were so many people that had gotten the drug habit from learning to use it. I am of the opinion that humanity would have been a great deal better off and there would have been a great deal more of humanity if the fountain syringe hadn't ever been invented.

There is still a great deal of prescribing for women with vaginal discharges without discovering whether it is a vaginal, cervical or uterine infection that is producing it. It is surprising how many men will prescribe a vaginal douche for a woman without making an examination. That must at one time have been the fashion in the profession of Arkansas, because I have in my possession a copy of the fee list of the Arkansas Medical Society, when it had one, and one of the Pulaski County Medical Society, in which an extra charge of \$2.50 is made for a vaginal examination. (Laughter).

As a matter of fact, in infections of the cervix, using a syringe where there is thick mucus in the cervix, I doubt whether ever a drop of the medicine reaches the surface of the cervical canal, except under those circumstances where the vagina is narrow and the nozzle is very large, under which circumstances, it probably forces the pus back through the Fallopian tube, and I have seen quite a number of acute cases of peritonitis due to the fact that infective material had been pushed ahead of the douche into the abdominal cavity. And, from that point of view, the point that medication is applied in that haphazard manner, medical treatment is a snare. I think it is perfectly true that the vaginal douche simply washes away the secretions that are brought out in the vagina, and has no curative effect. It seldom reaches the surface of the cervical canal at all, if that canal has thick mucus in it, and when it does reach that canal it nearly invariably does harm.

DR. DELANEY, in response: I accept Dr. Wood's correction. I was referring to the chronic conditions that we see. In these acute conditions, I can see where silver nitrate is useful. We all use it.

I think Dr. Thibault's point about the abuse of the fountain syringe is very well taken. It is surprising even yet the number of men who, without an examination or any further investigation, will give a prescription to be used at home for a douche. I don't think we ought to do that. I know that there is no man present who will do that.

FOCAL INFECTION*

S. F. HOGE, M. D., Little Rock

In the study of focal infections we are at once confronted with a vast amount of evidence which has been built up from the mystic

era of the long past. This condition is as old as time and as young as the rainbow, as variable as the signs of the sea and as inevitable as the rising sun. Aesculapius alludes to the subject, while Hippocrates deals with it more definitely; but it has remained for the army of bacteriologists and clinicians of the present day to analyze and systematize this knowledge in order that it may be interpreted in the light of clinical entities. To gain a clear appreciation of the influence of such subtle forces as that of bacteria or their toxic products situated in the crypts of the tissues entails a review of the development or evolution of the structures which make up that great complex known as the human body. Literature records data that seems to withstand the severest criticism of time and to establish the proof that focal infection dates clear on back to pre-historic man. In looking down through the animal scale which, in all probability, preceded man we find definite evidence of the effect of conditions that are entirely analogous to what we are pleased to interpret in the present light of our knowledge as focal infections. While the study of focal infection is most fascinating from the historical point of view it is only slightly less fascinating than the study of the evolution, and the moulding, and the perfection of tissues such as we see in the finished products. In fact, these two processes are so intimately and closely related that a modification of the one is associated with changes in the other. The development of the human body has resulted in the formation of a protective membrane or structure which covers the body in a most excellent manner. The cells which go to make up this integument are specialized to the very greatest extent that they may serve as a most efficient protection against the invasion of micro-organisms. This great structure is made up for the most part of two divisions, *i. e.*, that of the skin and mucous membrane. The structures are vested with different functions, yet not the least among these is that of protection. The mucous membranes are not so highly specialized in their protective qualities as might be expected since they are concerned to a very great degree in the absorption of the requisites of existence. This function has been supplemented with a series of slightly different structures known as the glandular tissues. The greatest area exemplified in the mucous structures is that of the alimentary canal. The function of this alimentary canal is that of preparing absorbing and

*Read at the 51st Annual Meeting of the Arkansas Medical Society, Hot Springs, May 18-20, 1926.

eliminating the essentials of metabolism. In the lower scales of animal life this is a very simple process, while as we advance in the scale it becomes a most complicated mechanism. The mucous membrane of the intestinal canal as seen in the vertebrates is unable to perform the digestive process without the assistance of some very definitely specialized structures. The most highly specialized and most important of these structures is that of the teeth. In some of the vertebrates the functional demands for such specialized structures has resulted in their being located in what might seem like some very peculiar positions. In all of them, however, we find them for the most part at or near the opening of this great tube, the alimentary canal. In some they may be found any where in the oral cavity, even clear on down into the esophagus. In man, however, where the last modification to yield efficiency has been demonstrated we find the teeth in perfect bilateral symmetry. These teeth, in a word, started from the epithelial structures and have grown in obedience to a demand which has resulted in their peculiar specialization. During this specialization they have lost to a very great extent many of their original attributes. One of these attributes, and probably the most important one, is that of their inability to oppose the invasion of microorganisms. The glandular appendages of the mucous membrane, such as the tonsils, the adenoids, the accessory sinuses, the glands and the mucous membrane lining the intestinal canal, the glands on the mucous membrane lining the genito-urinary tract, have all glorified in their ability to specialize for certain functions; yet, with that, they have all had to sacrifice one of the greatest essentials of existence, that of self-protection against invasion of external agencies, particularly of the infectious type. In no clearer example can we see the meaning of the words of Gray when he said "the paths of glory lead but to the grave."

In the studies of the mummies removed from the tombs of 4,000 years B. C. we see evidence of the ravages of focal infection. The conclusions are well drawn that the people of that day suffered and died from infectious lesions in a manner entirely analogous to that of the present time. Infections of the upper respiratory tract, sinuses, in and around and about the teeth and gums were as prevalent then as now. The outward manifestations of these toxic states followed a

course entirely analogous to those of the present day. It is of further interest to note that the lesions produced by the tubercle bacillus were not as prevalent in those days as at present and there was a slightly greater tendency for them to appear as focal lesions. Leprosy was known, but was not common. Neoplasia rings back through the history of the past as far as man's knowledge can travel. The present day studies of the problem of focal infection is championed by some of the most illustrious men of our profession. They have ever aimed to look at such lesions in their broadest aspect and to ever refrain from the conclusion that the area of involvement could be divorced from the general systemic states. This broad attitude has carried them into the fields of closely allied sciences, particularly that of dentistry and of biology. In all of these fields they have been rewarded with the most kindly co-operation on the part of the men engaged in a like line of work in their particular field. It has been through this combined effort that we are made to appreciate the part played by the different structures. For a long time very close attention has been given to the complete study of the teeth and the part that they might possibly play in the production of pathologic entities. Second to the study of the teeth has been the study of the mucous membranes of the upper respiratory tract, and following closely upon this is the study of residual infections in the middle ear and of stasis and infection in the intestinal canal, and last, but not least, the study of infections of the mucous membrane of the genito-urinary tract and its appendages. Only recently Price (1) has written a monumental monograph dealing with biologic physiology as influenced by dental lesions which bids fair to revolutionize our understanding of the intimate relationship of these conditions to altered body functions. Haden (2) has developed the bacteriologic investigation to a point beyond the most fanciful concepts of a few years ago. Mayo quotes that as much as 80 per cent of deaths occurring in the country today are either directly or indirectly due to bacterial disease and that the greater proportion of these are at one time or another focalized or cryptogenic in type. Some may remain focalized, others become generalized or systemic while still others bear all the attributes of focal processes, though they may never be demonstrable.

Helmholtz (3), Cabot (4) and Crabtree (5) have expanded our knowledge of residual in-

fection in nephritic tissue and at the same time elucidated the etiology of many conditions which have baffled investigation and interpretation. They are in accord in the major points of their investigations, but differ in the importance attached to the various organisms encountered.

Cotton (6) of Princeton, is firmly persuaded that many of the functional psychoses of the central nervous system are more or less intimately associated with static and toxic states of the colon. That these functional psychoses are for the most part mental symptom complexes, a direct result of anatomic lesions of brain tissue due primarily to physical disturbances. These symptoms are not yet attributable to any particular focal lesion, but more probably the results of many areas of cryptogenic bacterial activity. Williams (7) has demonstrated a relationship between oral infection and oral hallucinations and neurasthenias. Hamilton (8) has shown the prevalence of epilepsy is much higher in those persons harboring tissues which have sacrificed much of their ability to exclude bacterial invasion.

Pemberton (9) analyzed a series of 400 arthritides and found 52 per cent were carrying adenoid tissue in the tonsillar areas which absorbed toxins like a sponge; 33.5 per cent of this same series showed foci of infection in and about the teeth and gums, while 12.5 per cent showed foci of chronic infection in the genito-urinary tract.

The lesions of the cardio-vascular system, such as valvulitis endo-myocarditis, pericarditis, myocarditis and possibly arterio-sclerosis have long since indicated their intimate relationship to some focus of infection. Many infectious granulomas of the face have proven to be secondary to infection located in the oral cavity. Deland (10).

Thus might be continued the enumeration of these obscure and apparently idiopathic lesions and their association with focal infection, but the sequence of events would be dimmed unless attention was directed to the study of the *modus operandi*. Bacteriology has contributed much to our understanding in demonstrating the presence of organisms and at the same time determining to a great extent the different types of bacteria found, and their relative toxicity. The streptococcus clearly distinguishes itself in being the most frequent offender. This includes the two great varieties, *i. e.*, the hemolytic and non-hemolytic strains. Under the latter are the

familiar viridans and green producing cocci. Wherever the true hemolytic organisms is found, the process is proven to be more acute, or to be subsiding from an acute stage. There are times, however, when the true hemolytic streptococcus is the chief offender and yet the lesion is noted for its chronicity. There seems to have been established a type of symbiosis between the tissues and the virulent organism. The staphylococcus as a group are second to the streptococci. These organisms are frequently found in lesions of the kidneys and of the osseous system. The gonococci are capable of producing many symptom complexes, although they continue to harbor the crypts of glands of the mucous membrane lining the genito-urinary tract. The role played by the frequently found colon bacilli has not been so thoroughly elucidated as could be wished and much yet remains to be proven.

When bacteria enter the tissues, they multiply, destroy tissue cells and disturb orderly tissue metabolism. They may produce symptoms through their presence alone, but most often it is due to disturbed metabolism either on the part of the organism or the tissue cells. The end products of this diverted metabolism may be a most virulent tissue poison. These poisons may exert their activity at the site of the lesion or be taken up by osmosis and disseminated throughout the body. The appreciation of this dissemination has emphasized many differences in susceptibility on the part of different tissues. There seems to be a modification of resistance or an enhancement of affinity on the part of certain structures. So clearly is this shown in lesions produced by the toxins of the tetanus bacillus and diphtheria bacilli and typhoid bacilli that a selectivity is acknowledged, Rosenow (11).

The bacteria may emigrate from the local area, enter the fluid system and be wafted into some distant structure where a new focus may spring up. This new focus may repeat the primary lesion or show many variations.

TREATMENT

The treatment of these conditions consists in the location and the removal of the cause or causes, whichever the case may be. This might seem like a very easy way to dispose of such a difficult problem. The location of the causes may be as difficult, or even more difficult, than the removal of the condition. Not infrequently many foci may be concerned in the production of the clinical picture. The method of removal varies within wide ex-

tremes and the results may not be all that could be hoped for. Those who belong to the most radical group are inclined to eradicate the local lesion in the most complete manner and at the very earliest opportunity. Those who advocate the opposite extreme are inclined to wait until the tissues have built up a definite wall of resistance around the focus of infection. This pyogenic membrane is believed to serve as a very efficient filter or barrier in the dissemination of toxic products. It seems some objections might be laid at the door of both of these procedures. In the first instance, where immediate eradication is followed, there is evidence of complete disregard for the excellent effort put up on the part of the tissues in their attempt to limit the spread of the condition. It is a problem of the greatest import to decide from the outward manifestations just the degree of ascendancy on the part of the tissues or the invading organisms in the focal infection. A mistaken judgment in regard to the progress of the reaction usually results in aggravating the condition rather than benefitting it. Under these conditions a too hasty intervention should readily be expected to aggravate the condition. This we very frequently encounter in the removal of foci such as the teeth or of the tonsils in the active stage of invasion on the part of the organism. The same phenomenon is observed in the older method of treatment of abscesses or carbuncles when it was believed that the proper procedure was to incise the infected area and then apply pressure until the purulent and prepurulent material exuded through the opening. This, we all know to our regret, very frequently caused a small insignificant pustule to flare up with a vengeance necessitating the tissues re-establishing the wall of defense which we so unintentionally destroyed. On the other hand the failure to remove necrotic tissue or material or to eradicate the cause after the tissues have established their wall of resistance has expressed itself in a prolonged toxic state on the part of the patient. Not infrequently one sees the most prompt amelioration of the symptoms and the improvement of the patient, following eradication of the cause in the presence of a well developed limiting pyogenic barrier. It seems that a keener appreciation of the pathologic processes carried out on the part of the tissues will serve to minimize any error which might be made in either extreme. From a further study of these cases it would seem that the primary interference should not be

expected to result in a complete cure. In a study of the tissues around about such areas of infection one cannot fail to be impressed with the vast amount of change which must occur before the normal histologic structure is re-established. Until this tissue is replaced with normal or as nearly normal tissue as is possible pathology is still present. Any substitute tissue which may be employed in the repair is less viable than the normal structure and as such affords a field where organisms may retain a hold in a more persistent manner than in normal structures. It is in all probability a state in which the tissues after a time will be able to completely erase the infectious process. It seems, however, that the treatment should not be complete until the final end point is reached. The tissues may be very materially assisted by general systemic measures and at the same time introducing into the body a biologic substance preferably in the nature of vaccines, which will stimulate still further the production of antibody substance to the specific protein.

In conclusion it may be said (1) that focal infection is closely related to epithelial structures and probably dates back to even pre-historic man;

(2) That as epithelial structures specialize, they sacrifice the power of resistance to invasion;

(3) Single focus of infection is far less frequent than multiple foci;

(4) All chronic states should be considered in the light of focal infection;

(5) That treatment should consist in the eradication of all identified foci at the proper time and not stop with one and anticipate recovery of the condition;

(6) Both the bacteria and their toxins manifest a selectivity to a certain degree for particular tissues.

BIBLIOGRAPHY

1. Price, W. A.—J. A. M. A. 1925-v. 84:254.
2. Haden, Russell H.—Am. J. Med. Sci. 1925-v. 169:407 March. Arch. Int. Med. 1923-v. 32:828.
3. Helmholtz, H. F.—Am. J. Dis. Child. 1921-v. 22:606.
4. Cabot, Hugh, and Crabtree, E. G.—Surg. Gyn. and Obst. 1916-v. 23:495.
5. Draper, J. W., and Johnson, R. K.—Am. J. Med. Sci. 1925-v. 169:429.
6. Cotton, H. A.—Defective Delinquent and Insane—Scribner's, 1922.
7. Watson-Williams, E.—Brit. Med. Jour. 1925-v. 2:10 11. July 4.
8. Hamilton, A. M.—N. Y. Med. Jour. 1896-v. 64.
9. Pemberton, Ralph—Ann. Clin. Med. 1925-v. 3:648.

10. Deland, Ernest M.—Bost. Med. and Surg. Jour. 1925-v. 193:258.
11. Rosenow, E. C.—1912 to date.
12. Mayo, Chas. H.—Ill. Med. Jour. 1925-v. 47:274. April.
13. Vaughan, V. C.—Protein Split Products in Relation to Immunity and Diseases, Lea and Febiger, 1913.
14. Billings, Frank—Focal Infection (Lane Medical Lectures) Appleton, 1918.
15. Nixon, J. A.—Brit. Med. Jour. 1925-v. 2:11-12. July 4.
16. Roger—La Pathologie des Intoxications. Paris.

REPORT OF A CASE OF ASCITES TREATED SURGICALLY

R. C. DORR, M. D., F. A. C. S., Batesville.

Mrs. J. H. Marchant of Calico Roek, came to the Sanitarium for treatment, February 6, 1926, and gave the following history:

Father and mother living and in good health. Family history negative so far as hereditary diseases are concerned.

In May, 1923, she began to feel a weakness, which gradually grew worse, without pain or fever, however. After two years she began having pain of the right side at the crest of the ilium, with a fullness in her stomach and went to bed.

When she came to our Sanitarium February 6, 1926, she had an awfully distended abdomen, was emaciated, with great loss of weight and had been in bed nine months.

On February 9th, I operated upon her thinking perhaps she had an ovarian cyst that had caused the distention. In this I was mistaken; it was just ascites, which I believed was due to cirrhosis of the liver. The peritoneal cavity was free of adhesions and smooth.

I had a case just like it two years before, which I treated according to the authorities, but she finally died. I reflected a little while to see what was best to do. The abdominal wall was just about one-fourth of an inch thick. I finally decided to do the following:

I opened the abdomen at the median line, from the umbilicus to the pubes, then dissected the peritoneum loose from the wall, down to the brim of the pelvis, over to the spinal column, on both sides. Then with my hand, I separated the parietal peritoneum, above the umbilicus on both sides. Also the visceral layer around the vessels of the spleen

and liver, which I loosened as much as I could with my hand, without injury to the vessels or liver.

I left the peritoneum attached to the umbilicus. In closing up the lower abdomen, I stitched the peritoneum together, and the remainder of wall of abdomen was closed by itself. I did not drain. The wall collapsed and she had no muscular contractions for ten days.

On the 15th day she got in a car and rode home sixty-five miles up in the mountains. She had no bad symptoms after the operation.

I went to see her at her home five months after the operation. She had gained flesh and was doing her house work, looked well and hasn't any dropsy anywhere.

I have a right to believe she is cured of her ascites. However, I intend to keep in touch with her and see if there is any return of the disease, and will make another report.

BLOOD SEDIMENTATION AS AN AID TO DIAGNOSIS AND PROGNOSIS*

S. W. MORELAND, M. D., Jonesboro.

Gould defines Sedimentation "As the process of producing the deposition of a sediment, especially the rapid deposition by means of a centrifugal machine." In this paper the writer uses the term to describe the separation of the blood corpuscles from the fluid portion of the blood. As early as the days of Galen the ancients observed the buffy coat in pregnant women and in inflammatory diseases; it was observed that in these cases the buffy coat would form more rapidly than in normal blood. Now, this buffy coat is nothing more than a partial separation of the red cells from the fluid portion of the blood. In 1797 John Hunter, the great English physician, found an increased sedimentation velocity in patients suffering from inflammatory disease, and that the velocity was in direct relation to the severity of the inflammation. He observed that in acute rheumatism, in thirty seconds after venesection, the buffy coat began to form, though no coagulation had yet taken place. J. T. Palmer, who edited Hunter's work says: "Nothing can be more clearly proven than that there exists in the blood, a greater disposition to separate into its component parts in inflammation than in

*Read at the 51st Annual Meeting of the Arkansas Medical Society, Hot Springs, May 18-20, 1926.

*Read before the First Councilor District Medical Society held at Walnut Ridge Oct. 6, 1926.

the healthy state." After John Hunter, Mueller, Davy, Lehman and others, worked on the test and the subject attracted a great deal of attention from medical men. Then came the work of Virchow on cellular pathology and the profession lost interest for the time, in blood sedimentation. But in 1917 Fahroens accidentally noticed that in the blood of pregnant women, sedimentation was more rapid than in healthy blood. Linzenmeir continued the investigation, thinking to discover an early test for pregnancy; but it may be said in passing that the test is useless in pregnancy till after the third month. These men continued the investigation in Europe, Friedlander of Detroit took it up in America. Now, it is definitely known that in pregnancy after the third month and in practically all infectious diseases, there is an increased velocity of sedimentation of the blood. The technic for examination of the blood is simple: means must be used to prevent coagulation. The only instruments needed, are a hypodermic syringe, a medicine dropper, and sedimentation tube. To prevent coagulation, place five minims of a five per cent solution of soda citrate in the sedimentation tube. The tube holds a little more than one cubic centimeter. Just below the mark for the centimeter there are the figures 6, 12, 18. Now with the syringe draw off about one cubic centimeter of venous blood, and place it in the sedimentation tube exactly to the cubic centimeter mark. Mix by shaking. Place the tube in an upright position and watch results. See how long before the sediment reaches to the point on the tube marked 12. In the healthy adult woman it will take about 130 minutes; a little longer in the male.

The following case illustrates how it works; George G., age 16, with a family history of tuberculosis, was seen August 30, 1926. Has been losing weight for the past six months; coughs some, for the past twenty four hours has been spitting bloody sputum; no fever. Diagnosis, incipient tuberculosis. One week later a blood sedimentation test was made. Sediment reached the point marked 12 in 55 minutes. This patient refused to continue test, so no comparison could be made. While the clinical picture in this case was sufficiently plain for a reasonable certain diagnosis, the test confirms the presence of a severe infection. Now let us see how far this test may be used in diagnosis and prognosis. It will certainly discover the presence of an infection, but will not show the kind of infection,

nor where located; these facts must be determined by other means. But in prognosis the test is more valuable. Make a test every week. If the velocity of sedimentation is increasing, you know your patient is not improving; on the other hand if the velocity is diminishing you can confidently assure your patients they are improving.

Just why this increased velocity is present in infectious diseases is not positively known. It is supposed to depend on the more rapid catabolism of the proteins of the tissues.

If this short paper has aroused your interest, I trust you will make some tests. In six months from now bring the result of these tests to our next district meeting.

REFERENCES AND BIBLIOGRAPHY

- M. G. Grant—N. E. M. A. Quarterly, Sept., 1926.
 Friedlander, B.—Amr. Journal Obst., Feb. 1924.
 Works of John Hunter—By J. T. Palmer.
 Bochmer and Wassing—Jour. Lab. & Clinical Med., Dec., 1925.
 Baer and Reis—Amer. Journal Obst. & Gyn., May, 1925.
 Zeckwer and Goodell—Amr. Rev. Tuberc. Vol. 9, No. 4.
 Levinson—Amr. Rev. Tuberc. Vol. VI, No. 4.
 Alexander—Med. Jour. and Record, June, 1924.

COMMON RINGWORM OFTEN APPEARS IN CHILDREN

One of the most common forms of ringworm appears oftenest in children, according to Dr. George M. MacKee writing in *Hygeia* for November. It begins as a small round red area that enlarges, sometimes to the size of a silver dollar. The center is normal, but the narrow band or ring is usually elevated, scaly and red. Itching may be present, and, of course, ringworm is contagious. This simple form is easily cured by painting the spots lightly every few days with tincture of iodine.

Ringworm, which is caused by a fungus, may also attack the scalp, nails, hands, feet and other parts of the body. Barber's itch is ringworm of the bearded region of the male adult. Ringworm of the nails is disfiguring and difficult to cure. Persons suffering with this form should consult a physician as early as possible. Persons who have ringworm of the hands or feet should take precaution to prevent the nails from becoming affected.

THE JOURNAL

OF THE

ARKANSAS MEDICAL SOCIETY

Owned by the Arkansas Medical Society and Published under the direction of the Council.

WILLIAM R. BATHURST, Editor
810-812 Boyle Building, Little Rock, Arkansas.

Published Monthly. Subscription \$3.00 per year; single copies 25 cents.

Entered as second-class matter, June 21, 1906, at the postoffice at Little Rock, Arkansas, under the Act of Congress of March 3, 1879.

Acceptance for mailing at special rate of postage provided for in Section 1103, Act of October 3, 1917, authorized August 1, 1918.

The advertising policy of this Journal is governed by the rules of the Council on Pharmacy and Chemistry of the American Medical Association.

All communications of this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the State. Notice of deaths, removals from the state, changes of location, etc., are requested.

OFFICERS OF THE ARKANSAS MEDICAL SOCIETY

J. M. LEMONS, President.....	Pine Bluff
HENRY THIBAUT, President-Elect.....	Scott
G. E. TARKINGTON, First Vice-President.....	Hot Springs
T. F. KITTRELL, Second Vice-President.....	Texarkana
J. H. FOWLER, Third Vice-President.....	Harrison
R. J. CALCOTE, Treasurer.....	Little Rock
WM. R. BATHURST, Secretary.....	Little Rock

COUNCILORS

First District—THAD COTHERN.....	Jonesboro
Second District—J. L. JONES.....	Searcy
Third District—M. C. JOHN.....	Stuttgart
Fourth District—W. T. LOWE.....	Pine Bluff
Fifth District—W. P. COOKSEY.....	Magnolia
Sixth District—B. C. MIDDLETON.....	Texarkana
Seventh District—DEWELL GANN, SR.....	Benton
Eighth District—ANDERSON WATKINS.....	Little Rock
Ninth District—Sam G. Daniel.....	Marshall
Tenth District—THOMAS DOUGLASS.....	Ozark

COMMITTEES

SCIENTIFIC PROGRAM—R. J. Calcote, Little Rock, chairman; A. S. Buchanan, Prescott; R. H. T. Mann, Texarkana.

SCIENTIFIC EXHIBIT—C. E. Oates, Little Rock, Chairman; Homer Scott, Little Rock; D. E. White, El Dorado.

MEDICAL LEGISLATION—Earle H. Hunt, Clarksville, chairman; J. W. Walker, Fayetteville; Thad Cothern, Jonesboro.

STUDENT LOAN FUND—E. F. Ellis, Fayetteville, chairman; J. H. Lenow, Little Rock; Wm. R. Bathurst, Little Rock; G. A. Warren, Black Rock.

NECROLOGY—Cowley S. Pettus, Little Rock, Chairman; F. B. Kirby, Harrison; E. E. Barlow, Dermott.

HEALTH AND PUBLIC INSTRUCTION—C. W. Garrison, Little Rock, chairman; F. Michael Smith, Pine Bluff; M. E. McCaskill, Little Rock; President and Secretary of State Society.

CANCER CONTROL—Dewell Gann, Jr., Little Rock, chairman; John S. Jenkins, Pine Bluff; J. C. Hughes, Hoxie.

INFANT WELFARE—A. C. Kirby, Little Rock, chairman; N. D. McCormack, Ft. Smith; H. W. Browning, Little Rock.

HOSPITALS—J. D. Southard, Fort Smith, chairman; D. A. Rhinehart, Little Rock; J. T. Palmer, Pine Bluff.

Editorial

WE GROW AND GROW AND GROW

In this issue of the Journal we publish the annual official roster of the Arkansas Medical Society. And again it is our pleasure and pride to report further increase in membership, so that this roster contains more names of active members that at any other time in the more than half a century of the Society's existence.

There are reasons for this outside of any personal effort of members in inducing brother physicians to unite with the Society. Chief among these reasons may be found in the increased interest in the various District and County Societies. Attendance is better, programs that are worth-while are given; programs which are instructive and full of interest so that physicians who attend do not feel that they have wasted their time; but, on the contrary, feel that they are benefited. As the success of these meetings is observed the non-member feels that he is missing something by remaining "on the outside looking in." Nothing succeeds like success and the flourishing society flourishes more by flourishing—to use a somewhat obscure simile which merely is synonymous of the biblical paradox that "Unto every one that hath shall be given, but from him that hath not shall be taken away even that which he hath." Therefore while the already strong Society increases in strength the weak one which really needs strength grows weaker and dies.

The officers of the county societies, particularly the secretaries, are factors in keeping up interest by reminding members of the dates of meetings, by collecting dues, and reporting and remitting promptly to the State Society. In many other ways also a good secretary is a treasure to any society.

The committees appointed by President Lemons are busily engaged in laying extensive plans for a campaign which will make the Society still stronger and more influential.

On December 8th, the officers and councilors of the State Society will meet in Little Rock to hear the preliminary report of the Legislative Committee and make plans for the fiscal year. In view of the fact that the Legislature will meet in January the report of the Legislative Committee will be of unusual interest.

Growing in strength in members, as the Society is, it should be easier to get a hearing on important bills affecting the profession and the public health.

KEEPING THE PROFESSION CLEAN

It is not necessary to mention names, but it is in order to commend the action of the State Board of Medical Examiners at their meeting in Little Rock, November 9, in suspending a physician because of continuous inebriety. It is not to be held that a practitioner be a prohibitionist or total abstainer. There is no question as to whether alcohol as a beverage is or is not harmful. A physician is but human and there may be occasions when "good fellows get together" that even a doctor may exceed the bounds of strict sobriety. None of these questions enter into the case in point.

But an occasional drink—even an occasional excess—is one thing and habitual inebriety is another. The doctor who becomes notoriously a heavy drinker, who is seen in public in an intoxicated condition, not once but constantly, brings disgrace on the profession. He is unfit to treat the sick and he sets an evil example. If for no higher reason than protection of the public the board must act. The profession must be purged of such members as bringing disgrace upon it by glaring immoralities and breaches of ethics.

In the case under discussion there was no actual, permanent expulsion. The board may, after a year of probation, restore the offending member to his practice, if it is shown that he has reformed. It is to be hoped that with such a lesson the offending member may realize the necessity of rehabilitating himself and re-embark on a successful career in his profession. There have been many such cases.

In commending the board on their efforts to "Keep the Profession Clean" the Journal offers its moral and financial support.

BLOOD RELATIONSHIP BETWEEN MAN AND THE ANTHROPOIDS

In these days when in many States efforts are being made to stop the march of science by anti-evolution laws, a series of experiments made at the Rockefeller Institute by Landsteiner and Miller, are of peculiar interest as showing a certain consanguinity between man and the Anthropoids.

These experiments, as reported in The Journal of Experimental Medicine, show the extraordinary fact that ape blood contains the same four groups of agglutinins that are found in the blood of man. The blood of monkeys reveals no such classification nor

does the blood of any other animals. Further it is shown that the horse and donkey, so closely related that they can fecundate each other, have less blood relationship than exists between man and the anthropoids. Orang-outans, gorillas, chimpanzees and man reveal immunologic qualities of the blood that are shared by neither monkeys nor any other animal whatever so far as known.

Editorial Clippings

THE PHYSICIAN OF THE FUTURE

In the midst of the present social upheaval, one may well wonder the position physicians will eventually occupy in the cosmic scheme. Intelligent observers inform us that the answer depends entirely on our own conduct—the mass conduct inherent in intelligent organization. If physicians are to assume that leadership essential to sane medical progress, they must evolve an outline of purposes, a constructive forward-looking program of things to be done, of channels through which co-operation must flow toward their leadership. This constructive program must be so wisely planned and so faithfully followed by all worth-while physicians that at least the intelligent element of public opinion will go with it.

Individually, physicians are in better position than at any previous time, and there is nothing in sight to indicate a serious disturbance of mutually beneficial relationship between the adequately educated intelligent physician and his intelligent client who chooses his health adviser and co-operates with him in promoting personal and family health.

It is probable that such effective and mutually helpful service will be in great demand so long as a vestige of personal liberty lasts. Ever tightening laws, rules and regulations may still further embarrass both the personal health physician and his client. State medicine—government medicine, socialized medicine—as operated through scores of channels, may continue to expand until the majority of physicians and the majority of people will become elements in some vast government machine; but even so, private individual arrangements for personal and family health service are likely to continue indefinitely to demand skilful physicians to care for the most intelligent members of society.

In countries where medicine has become largely a government function, the individual

who can select and compensate his own physician on a personal basis still is the envied citizen, and the physician who gives only such service is the envied one among his colleagues. Despite the stock argument emphasizing the alleged "purely selfish" interest of the physician in promoting health as a largely personal matter, to the contrary, the opportunities for personal health service for those who desire it, although surrounded by government regulations enforced by salaried inquisitors, will probably continue as the method of choice of the elect and a goal well worth striving for by the worth-while physician.

The intrusions and interferences are not of physicians' choosing, but are being forced increasingly on physicians and their clients by the unwarranted attempts at expansion of government into phases of personal health which violate every tradition of our people and are repugnant to those who serve and those served by a great profession.

Society, acting through representative government, has responsibilities in medical and health matters as in other fields, but the line of demarcation between what is public and what is personal in matters of health must not be pushed back by government bureaus until government has invaded the privacy of the home and stands at the bedside of the individual.—*Jour. A. M. A.*, Oct. 30, 1926.

Abstracts

PERSONS OVER 50 YEARS SHOULD WATCH DIET

"At 50 a man is either a fool or a physician," says an old proverb. At the age of 50 a man should have learned his limitations; if he lives accordingly he has the judgment of a physician; if he ignores his limitations he is a fool, explains Dr. Clarence W. Lieb in the September *Hygeia*. Most people over 50 eat too much. In middle life, food quantity is more important than food quality.

Overeating has more unfortunate consequences than digestive disturbances. A fat person at 50 has much less chance for a long life than a thin one. Tremendous energy is expended in the digestion of a large meal. The digestive tract is a muscular tube of great length through which food must be propelled by muscular energy. Therefore the stored up energy may be drained by digestive fatigue just as by physical or mental fatigue.

Each person's diet must be varied to meet his individual requirements. Dieting to reduce should be done scientifically. Disaster may result from following a diet taken from a medical book, or one prescribed for some one else who has a different need. On the whole, a light diet of simple foods, adjusted to a person's own limitations, is most advisable for those past 50 who wish to live long and well.

KEROSENE POISONING

Orville Barbour, Peoria, Ill. (*Journal A. M. A.*, Aug. 14, 1926), reports four cases of kerosene poisoning. One of the children died within a few minutes after medical aid was summoned, and no laboratory data could be obtained. However, a noticeable feature of the case was the bright cherry red color of the lips. This persisted until after death. Two of the patients did not get enough kerosene to cause any alarming symptoms. In the fourth case, lavage yielded a large amount of yellow emesis, with casein curds and a pronounced odor of kerosene. An enema was expelled with a large amount of fecal matter and a marked odor of kerosene. As the boy's condition showed no improvement, he was given 7 1-2 grains (0.5 Gm.) of caffeine sodio-benzoate hypodermically and an ounce (30 cc.) of castor oil by mouth, and was placed in a hot wet pack for thirty minutes. One hour later he was still comatose. His temperature had risen a degree higher, and his pulse rate had increased to 180. He was again placed in a hot wet pack, and kept there for twenty minutes. Following this, his temperature dropped a degree, and he seemed somewhat better. The child's general condition continued to improve.

RAY AND LIGHT THERAPY IN OTOLARYNGOLOGY

—Violet ray and quartz light therapy have not been scientifically established as of great value for conditions of the nose and throat, as compared with the generally accepted medical treatment. With every new type of treatment, especially along the line of mechanical or physiotherapy, some investigators become over-enthusiastic and report glowing results. As time elapses, it is found that most of these measures give some relief to a small percentage of patients, but fail entirely in many others.—(*Jour. A. M. A.*, Aug. 21, 1926 page 607).

Personal and News Items

Dr. Wm. R. Bathurst, Little Rock, has severed his connection with the Physicians Life Insurance Company.

Dr. Sam G. Daniel of Marshall, has been appointed a member of the Council to succeed the late Dr. L. Kirby.

Word has been received from the Dermatological Research Laboratories that they appreciate the patronage given to the D. R. L. Arsphenamines by physicians in this State.

These products have been advertised in this Journal for some time and it is gratifying to know that the readers have taken cognizance of the support of the advertisers. Also, that they are aware of the quality, safety and therapeutic efficiency of the dermatological remedies for syphilis, which were the first to be made in this country and supplied to the physicians of America when the World War was in progress.

The following physicians were visitors to Little Rock recently: Drs. J. L. Jones, Searcy; G. A. Warren, Black Rock; R. C. Dorr, Batesville; W. G. Pittman, Pine Bluff; Ira H. Erwin, Newport.

In regards to acidophilus therapy one must always keep in mind to have the patient ingest sufficient quantities of either lactose or dextrin in order for the organism to flourish in the intestinal canal.—J. S. Grove, M. D., Chicago—Ill. Medical Journal, Aug., 1926.

The chairman of the Cancer Control Committee has written the secretaries of the county medical societies, requesting that a cancer symposium be held at an early meeting.

The Journal would appreciate compliance with this request.

In our October news items we said that Dr. R. A. Law, formerly of the State Hospital for Nervous Diseases, had accepted service with the Shipp-Bond Clinic, as pathologist. We should have said roentgenologist and hereby make correction with apologies to Dr. Law.

We regret to announce the death of Mrs. Sudie Benton Cuning, wife of Dr. John R. Cuning of Lonoke. Mrs. Cuning died November 3d. She is survived by her husband, one son, Dr. J. E. Cuning of Little Rock, a sister, Mrs. B. J. Burnett and two brothers, Dr. T. E. Benton and R. A. Benton of Lonoke.

Dr. John G. Cullins, roentgenologist, U. S. Veterans Bureau Hospital No. 81, Bronx, New York, was in Little Rock recently renewing old acquaintances. He was returning to New York after a visit to El Dorado, his former home.

Gov. Tom Terral appointed Dr. Sam J. Allbright of Searcy a member of the State Board of Medical Examiners of the Arkansas Medical Society, to fill the unexpired term of the late Dr. John C. Swindle of Walnut Ridge.

Dr. John R. Dibrell, Diagnostician and Internist, 909 Main Street, Little Rock, announces the association of Dr. Oliver C. Melson. Dr. Dibrell has enlarged his building to include twelve rooms, making one of the most modern offices in the State.

Adj. Gen. J. R. Wayne announces the appointment of Dr. Phil E. Thomas of Little Rock first surgeon for the 154 Observation Squadron, Arkansas National Guard. Dr. Thomas was a captain in the Medical Corps during the World War and served ten months overseas.

The Monroe and Phillips County Medical Societies have endorsed the plan for Medical Relief in Disaster as adopted at the last meeting of the American Medical Association, and directed that the President of the County Medical Society, ex-officio, be local Director of Disaster Relief.

We have an inquiry from the State of Montana, wanting a physician to locate in a thriving little town. Contract practice, paying \$150.00 a month with outside work that has possibilities of \$1,000.00 a month. Particulars at the office of the Journal, 810 Boyle Building, Little Rock.

At the Annual Meeting of the officers of the American College of Surgeons, held at Montreal, October 28, Dr. W. F. Smith of Little Rock, was elected a member of the Board of Governors of the College for a term of three years. At the same meeting, Dr. Paul L. Mahoney of Little Rock was made a Fellow.

Beginning with the January, 1927 issue The Radiological Review will be published monthly instead of bi-monthly and it will increase its number of pages from 32 to 64. This is the only journal devoted to the progress of x-ray and radium from the standpoint of the general practitioner and the specialist in branches other than radiology.

WANTED—Salaried appointments for Class A physicians in all branches of the medical profession. Let us put you in touch with the best man for your opening. Our nation-wide connections enable us to give superior service. Aznoe's National Physicians' Exchange, 30 North Michigan, Chicago. Established 1896. Member the Chicago Association of Commerce.—(Adv).

MONROE COUNTY HEALTH CLINIC

At the pre-school age health clinic held during the Monroe County Fair, October 4-9. There were 142 children examined by the physicians of the county, aided by Miss Hortense Murry, County Health Nurse. Of this number, only 23 were found without defects. 61 per cent were under weight. The predominating defects were enlarged and diseased tonsils. Some were found with defective eyes, umbilical hernia, defective spine, enlarged abdomen, diseased ears, enlarged glands and some needed circumcising.

This was the first attempt at a pre-school age clinic in Monroe County to be held only by local nurses and physicians. They expect to have at least one such clinic every year.

The University of Arkansas Medical School opened its 48th annual session September 16, 1926, with increased enrollment over last year, and a fine bunch of energetic, enthusiastic students. Among the additions to the faculty we note Harvey S. Thatcher, A. M., M. D., professor of pathology, who comes from the Western Reserve University School of Medicine, Cleveland; Harold Skelton, A. M., instructor in physiology, who comes from the University of Minnesota; Carl G. Davis, A. M., associate professor of chemistry, who for a number of years was head of the Science Department of Onachita College. Benj. W. Hess, A. B., instructor in bacteriology, who comes from the University of Kansas. D. T. Hyatt, A. B., M. D., has been promoted to position as associate professor of pharmacology; Paul M. Fulmer, A. B., M. D., has been appointed associate professor of anatomy; Paul Simon, B. S., M. D., has been engaged as instructor in anatomy and Anna Barlow, A. B. has been appointed instructor in bacteriology.

AN AID TO THE MEDICAL PRACTITIONER

Physicians treating venereal disease cases have frequently expressed a need for a pamphlet containing instructions and advice to be given to venereal disease patients. Due to the nature of these diseases and the regimen which proper treatment requires, the need for such a publication has long been apparent. Some time ago the U. S. Public Health Service prepared a pamphlet known as, "Important Confidential Information" expressly for this purpose. The leaflet is in two parts, one dealing with Gonorrhea and the other with Syphilis. Advice is given among other points on the following: Importance of continuing treatment until cured, proper diet while under treatment, proper care to prevent the spread of the disease, the futility and danger of quacks and self treatment, sex conduct and marriage.

Many physicians have found this publication a valuable aid in securing the co-operation of the patient while under treatment and also as an aid in holding the patient until cured or rendered non-infectious. Copies of this publication are available from most State Departments of Health or they may be secured by writing to the U. S. Public Health Service, Washington, D. C.

PHYSICAL THERAPY—The Council on Physical Therapy of the American Medical Association publishes a report on the present status of physical therapy. The Council cautions that while there are certain definite indications for the use of some one or a combination of several physical agencies in the treatment of disease, it is harmful practice to depend on these agencies alone, to use them in place of better proved methods, or to employ them without having first thoroughly studied the patient from the viewpoint of diagnosis. The Council warns against the indiscriminate use of physical measures and the danger that their use may lead into dishonest practice or quackery. The physical measures that have been found to have certain therapeutic value include: 1. Heat, Natural and Artificial. 2. Hydrotherapy. 3. Light. 4. Electricity. 5. Massage. 6. Therapeutic Exercises. The Council feels that the following considerations must receive the most careful attention of the medical profession: 1. Physics, physiology and biochemistry must be called on to dispel the empiricism of the past and to prove the value of various physical agencies. 2. Physi-

cal therapy must be recognized as a definite part of medicine, practiced and controlled by graduate physicians. 3. Since physical therapy is a definite part of medicine, every medical school should give thorough training in this subject. 4. Persistent, prolonged effort must be made to eradicate the abuses of physical therapy. The Council proposes to point out to the medical profession the advantages and the disadvantages of physical therapy so that its abuses may be reduced to a minimum, and its scientific possibilities may be appreciated. (Jour. A. M. A., Oct. 16, 1926, page 1302).

STATEMENT OF THE FACTS AND
OPINIONS AGREED TO BY THE IN-
TERNATIONAL MEETING ON CAN-
CER CONTROL HELD AT LAKE MO-
HONK, N. Y., U. S. A., SEPTEMBER
20-24, 1926.

Although the present state of knowledge of cancer is not sufficient to permit of the formulation of such procedures for the suppression of this malady as have been successfully employed for the control of infectious diseases, there is enough well established fact and sound working opinion concerning the prevention, diagnosis and treatment of cancer to save many lives, if this information is carried properly into effect.

1. The causation of cancer is not completely understood, but it may be accepted that for all practical purposes cancer is not to be looked upon as contagious or infectious.

2. Cancer itself is not hereditary, although a certain pre-disposition or susceptibility to cancer is apparently transmissible through inheritance. This does not signify that, because one's parent or parents or other members of the family have suffered from cancer, cancer will necessarily appear in other persons of the same or succeeding generation.

3. The control of cancer, so far as this subject can be understood at the present time, depends upon the employment of measures of personal hygiene and certain preventive and curative measures, the success of which depends upon the intelligent co-operation of the patient and physician.

4. Persons who have cancer must apply to competent physicians at a sufficiently early stage in the disease, in order to have a fair chance of cure. This applies to all forms of cancer. In some forms early treatment affords the only possibility of cure.

5. Cancer in some parts of the body can be discovered in a very early stage, and if these cases are treated properly the prospect for a permanent cure is good.

6. The cure of cancer depends upon discovering the growth before it has done irreparable injury to a vital part of the body and before it has spread to other parts. Therefore, efforts should be made to improve the methods of diagnosis in these various locations and the treatment of the cancers so discovered.

7. The public must be taught the earliest danger signals of cancer which can be recognized by persons without a special knowledge of the subject, and induced to seek competent medical attention when any of these indications are believed to be present.

8. Practitioners of medicine must keep abreast of the latest advances in the knowledge of cancer in order to diagnose as many as possible of the cases of cancer which come to them.

9. Surgeons and radiologists must make constant progress in the refined methods of technic which are necessary for the diagnosis and proper treatment not only of ordinary cases, but of the more obscure and difficult ones.

10. There is much that medical men can do in the prevention of cancer, in the detection of early cases, in the referring of patients to institutions and physicians who can make the proper diagnosis and apply proper treatment, when the physicians themselves are unable to accomplish these results. The more efficient the family doctor is, the more ready he is to share responsibility with a specialist.

11. Dentists can help in the control of cancer by informing themselves about the advances in the knowledge of the causes of cancer, especially with relation to the irritations produced by imperfect teeth and improperly fitting dental plates. They can also help by referring cases of cancer which they discover to physicians skilled in the treatment of cancer in this location. It may be doubted whether all dentists fully realize the help which can be obtained from x-ray photographs in revealing not only the state of the teeth but the condition of the bone surrounding them.

12. Medical students should be instructed in cancer by the aid of actual demonstrations of cancer patients, and this to a sufficient extent to give them a good working knowledge of the subject.

13. The most reliable forms of treatment, and, in fact, the only ones thus far justified by experience and observation, depend upon surgery, radium and x-rays.

14. Emphasis should be placed upon the value of the dissemination of the definite, useful and practical knowledge about cancer, and this knowledge should not be confused nor hidden by what is merely theoretical and experimental.

15. Efforts toward the control of cancer should be made in two principal directions: (1) the promotion of research in order to increase the existing knowledge of the subject, and (2) the practical employment of the information which is at hand. Even with our present knowledge many lives could be saved which are sacrificed by unnecessary delay.

HOW TO ADD YEARS TO LIFE AND LIFE TO YEARS*

WILLIAM D. HAGGARD, M. D.,
Nashville, Tenn.

(We quote only the section of this article that pertains to Health Examinations).

Periodic health examination is the acme of preventive medicine for the patient and the apotheosis of pre-clinical medicine for the profession, and requires a big program. The Medical Society should sell it to its own members and then to the laity by proper informative lectures to special groups, churches, clubs, schools, public meetings and fraternal organizations. Leaflets for distribution among the profession should be prepared by a special committee, another for popular distribution among the people at large for their information. Posters should be obtained for quick visual education, a *health week* established locally, the press should be called on for its help in the essentially individual and public health movement.

In the apparently normal person, who has a systematic physical examination, even if no real abnormality is found, he often needs and will ask about other health problems, those of adolescence, sex education, exercise, diet, environment, mental hygiene and the principles of sanitation.

If all the duty of life comes from duty well done, there is no more gratifying experience than the appreciation the patient expresses after a thorough, painstaking examination. They want it, they deserve it, they appreciate it. The satisfaction of the average person after having passed a successful physical examination and test, is really appealing. The opportunity for correction of minor defects and incipient disorders is alluring. The "ounce of preventive" must have been coined in anticipation of universal physical examination of the apparently well. So many conditions can be presented, many more alleviated, and cure can be invoked in the cases still amenable to relief.

It will take such a large block of diseases from the advanced and the irremediable class into the incipient and curable class. It will lay the ghost of the age-old plaint of the physician "If I had only seen you a little earlier."

One out of six applicants for life insurance is declined or postponed. The annual health audit will detect albumin or sugar, high blood pressure, slight cardiac disorder, incipient tuberculosis, beginning neoplasm, and any and everything else. Your family physician will do the rest. What does it profit a person to be an ostrich with his ailments or like the Spartan youth to hide a disease until it gnaws out his vitals? Get the disease before the disease gets you. Get it early. Get it before you think you have it.

People have too long had such faith and confidence in their physician that they think he can cure anybody who has not been dead over three days. Our profession admires the faith of their clientele, but dislikes to be put in such superlative and unequal tests.

If elevators are inspected regularly, why not one's mouth and teeth? If a boiler must be examined regularly, why not your heart and lungs? You have tested the brakes on your car, why not the kidney function? You have your watch regulated, but not your diet. You have your batteries charged, but you let your weight run down from disease.

Should the most complex and wonderful mechanism in the world, that not made with hands, be allowed to become broken or impaired, to corrode or disintegrate? Neglect your business if you must, neglect your golf if you can, neglect your wife if you dare, but don't neglect your physician and a yearly physical examination and health inventory on your birthday.

*New Orleans Medical and Surgical Journal, July, 1926.

Communications

Dr. William R. Bathurst, Secretary,
Arkansas Medical Society,
Little Rock, Arkansas.

Dear Doctor Bathurst:

The following resolutions were adopted by the House of Delegates of the American Medical Association at its annual session held in Dallas:

Resolved, That the section on Preventive and Industrial Medicine and Public Health approves the following resolution and urges its adoption by the House of Delegates:

Whereas, The registration of births and deaths at the time of their occurrence furnishes official record information of much value to individuals; and,

Whereas, The registration of deaths, with information on certain points, is essential to the progress of medical and sanitary science in preventing and restricting disease and in devising and applying remedial agencies; and,

Whereas, All the principal countries of the civilized world recognize the necessity for such registration and enforce the same by general laws; and,

Whereas, There are still seven States which either have defective death registration laws or have death registration less than 90 per cent complete; and,

Whereas, There are still fifteen States which either have defective birth registration laws or have birth registration less than 90 per cent complete; and,

Whereas, After a twenty-five year campaign to secure nation-wide registration of births and deaths, a drive is now on to reach this goal before 1930; now therefore, be it

Resolved, By the House of Delegates of the American Medical Association in annual meeting assembled, that the American Medical Association hereby expresses approval of this movement and requests the favorable consideration and action of the State authorities, to the end, that good State laws for the registration of births and deaths may be enforced and that national registration of births and deaths may become a reality before 1930.

As Secretary of the Association, I have been instructed to send copies of these resolutions to the secretaries of constituent associations in the States which are not included in the registration area for births and deaths.

As you know, the American Medical Association and many of its constituent State associations have been instrumental in securing adequate registration laws in the States now included in the registration area. These organizations earnestly favored the adoption of the so-called model vital statistics law, and were instrumental in securing its adoption by the Legislatures of several States.

The resolutions adopted by the House of Delegates present the reasons for the need of enactment of adequate registration laws, as well as for the extension of the registration area until it shall embrace all of the States of the Union. This matter is brought officially to your attention in the hope that it may be presented to the proper officers or authoritative bodies of the Arkansas Medical Society with a view to securing action that will result in bringing the State of Arkansas into the registration area.

I shall be grateful indeed to you if you will advise me as to any action that may be taken in this important matter so that I may report the progress that may be made to the House of Delegates at the annual session of the American Medical Association to be held in Washington in May of 1927, or at a future annual session.

Very sincerely yours,

OLIN WEST,
Secretary A. M. A.

County Societies

FRANKLIN COUNTY

(Reported by THOS. DOUGLASS, Secretary)

The Franklin County Medical Society held its regular meeting Tuesday, November 9, at Ozark.

Present: Porter, Hansberry, Gibbons, Blackburn and Douglass.

A request from Dr. Dewell Gann, Jr., Chairman of Cancer Control Committee, that one meeting be devoted to the subject of Cancer, was presented to the Society. It was decided that the next meeting should be devoted to that subject. Dr. Porter will be the essayist.

Several interesting cases were reported and discussions of various subjects, including the use of space in local newspapers for presenting important health subjects.

The Society adjourned to hold its annual meeting and banquet December 14.

MONROE COUNTY

(Reported by W. L. BOSWELL, Secretary)

The Monroe County Medical Society met in Clarendon, October 12, 1926.

Present: Stout, McKnight, Murphy, Houston, Phipps, Boswell.

Dr. P. E. Thomas, Sr. was appointed to go before the Quorum Court and make a plea for appropriation to retain a public health nurse for next year.

A very interesting scientific program was presented, as follows:

"The Use of Duodenal Tube in Diagnosis and Treatment of Gall Bladder Disease" by Dr. Stout. He also reported two interesting cases, one, a case of a man with repeated attacks of violent headaches, who had visited various doctors and clinics over the country in an effort to locate the cause, and at present, x-ray shows a needle in the dura, evidently broken off when a spinal puncture was made. The other case was that of concussion of the brain with double vision.

Two cases of gunshot wounds, one through the chest and one through the abdomen, were reported by Dr. Houston.

Dr. Phipps reported a case of "Eclampsia" treated with magnesium sulphate intravenously, which controlled the convulsions. Onset of labor, four days later with normal delivery.

Drs. N. E. Murphey and J. H. Phipps were appointed to read papers at the next meeting.

SALINE COUNTY

(Reported by J. M. PHILLIPS, Secretary)

The Saline County Medical Society met at the Court House, November 1, 1926. President Buckley being absent, the meeting was called to order by the Secretary. Dr. Steed was elected president *pro tem*, and minutes of previous meeting adopted as read.

Several interesting subjects were discussed, after which the following officers were elected for 1927:

President, W. S. Davis, Owensville; Vice-President, T. E. Buffington, Benton; Secretary, J. M. Phillips, Benton; Treas.; Dewell Gann, Sr., Benton; Censor, C. J. Steed, Benton; Delegate to State Medical Society meeting, E. A. Buckley, Bauxite; Alternate, W. W. Ward, Alexander.

The Society adjourned to meet the first Monday in December, 1926.

Abstracts

FAMILY PHYSICIAN'S PLACE IN INSPECTION OF SCHOOL CHILDREN

Mary Evelyn Braydon, Richmond, Virginia (Journal A. M. A., Sept. 18, 1926), attempts to show three things: first, that the present general method of caring for the health of school children is neither practical nor permanent; second, that it is possible to formulate a plan which will be both practical and permanent; and, third, that the family physician has a very definite place in such a plan. The Virginia plan is discussed. One of the main features of the Virginia plan at present is requiring every teacher to make a physical inspection of every pupil at the beginning of every session and of every pupil who may enter school after it begins. They differentiate between a physical inspection and a medical examination. The inspection is made in the schoolroom and the medical examination at the physician's office. In 1921, the State board of health formulated a course in physical inspection and school hygiene embodying the requirements of the West law. This course was approved by the State board of education, which made it a necessary part of the training of all prospective teachers and a requirement for all teachers applying for certificates. The course covers the following points; (1) Physical defects and their control. (2) Communicable diseases and their control. (3) Health instruction, including personal hygiene and prevention of accidents. (4) Care of the school plant. Five years were allowed (to Sept. 1, 1925) for all the teachers in Virginia to fulfil the requirements of the West law. During this time approximately 3,000 teachers a year received instruction in how to safeguard the health of children in the schoolroom. This was secured through one of the following agencies in Virginia: colleges; summer school courses; extension courses of colleges; correspondence courses given by one college and by the State board of health. Today all students preparing to be teachers in the institutions offering teacher training are receiving this course.

List of Members of the Arkansas Medical Society for 1926

ARKANSAS COUNTY		BOONE COUNTY—Continued		CLEBURNE COUNTY	
Coleman, J. E.	Laurinburg, N. C.	Jackson, G. I.	Harrison	*Hornbarger, W. J.	Heber Springs
Dickens, Homer	DeWitt	Johnson, J. J.	Harrison	Hall, H. J.	Higden
Drennen, S. A.	Stuttgart	Kirby, F. B.	Harrison	CLEVELAND COUNTY	
Fowler, Arthur	Humphrey	*Kirby, L.	Harrison	Ellis, W. S.	New Edinburg
John, M. C.	Stuttgart	McCurry, D. K.	Alpena Pass	Hamilton, A. J.	Rison
Lowe, W. W.	Gillett	McFerrin, J. O.	Jasper	Johnson, S. C.	Kingsland
Lumsden, C. A.	DeWitt	Owens, D. L.	Harrison	McMurtrey, J. S.	Rison
Moorehead, W. H.	Stuttgart	Poynor, Wm. H.	Harrison	*Sadler, H. D.	Rison
Morphew, L. H.	Stuttgart	Routh, C. M.	Harrison	Wilson, H. O.	Rison
Neighbors, J. E.	Stuttgart	Sexton, J. W.	Mt. Judea	COLUMBIA COUNTY	
Park, Chas. E.	DeWitt	Sims, J. L.	Harrison	Baker, J. J.	Magno'ia
Rasco, C. W.	DeWitt	Wallace, Jno. M.	Harrison	Brandon, C. W.	Emerson
Riley, H. C.	Bayou Meto	BRADLEY COUNTY		Cooksey, W. P.	Magno'ia
Strait, C. W.	Stuttgart	Crow, M. T.	Warren	Horn, W. H.	Taylor
Swindler, E. B.	Stuttgart	Fike, W. T.	Warren	Jones, T. H.	Magnolia
Whitehead, R. H.	Gillett	Gannaway, C. E.	Warren	Jordan, T. S.	Taylor
Winkler, E. H.	DeWitt	Hartsell, W. L.	Warren	Kitchens, H. M.	Waldo
Word, J. F.	St. Charles	Johnson, R. L.	New Edinburg	McLeod, G. F.	Magnolia
ASHLEY COUNTY		Martin, C. N.	Warren	McWilliams, C. T.	Magnolia
Barnes, L. C.	Hamburg	Martin, Rufus	Warren	Smith, P. M.	Magno'ia
Cockerham, H. E.	Portland	Reasons, W. B.	Hermitage	Souter, A. J.	Waldo
Cone, A. E.	Portland	Roark, W. N.	Hermitage	Stevens, C. D.	Magnolia
Crandall, M. C.	Wilmot	Sheriff, J. P.	Legels	Walker, J. C.	Emerson
George, B. F.	San Angelo, Texas	Wilson, Geo. L.	Jersey	Wilbourn, C. E.	Magnolia
Hawkins, M. C.	Parkdale	CALHOUN COUNTY		CONWAY COUNTY	
Holliday, B. F.	Parkdale	Black, C. T.	Thornton	Bradley, A. R.	Morrilton
Miller, E. L.	Crossett	Jones, E. T.	Hampton	Bruce, W. H.	Morrilton
Norman, W. S.	Hamburg	Rhine, T. E.	Thornton	Burgess, T. E.	Perry
Parker, J. L.	Snyder	CARROLL COUNTY		Colay, J. H.	Cleveland
Setzler, G. H.	Crossett	Bohannon, J. H.	Berryville	Fleming, J. T.	Hattievile
Simpson, J. W.	Hamburg	Butt, W. A.	Green Forest	Goatcher, A. L.	Plumerville
Spivey, C. E.	Crossett	Carter, A. L.	Berryville	Holbrook, J. F.	Plumerville
White, E. O.	Rawls	Donaldson, C. W.	Green Forest	Hardison, T. W.	Morrilton
Williams, R. G.	Parkdale	Huntington, R. H.	Eureka Springs	Holloway, W. R.	Center Ridge
Wood, J. T.	Crossett	John, J. F.	Eureka Springs	Jackson, J. H.	Springfield
BAXTER COUNTY		Pace, Henry	Eureka Springs	Jones, R. A.	Perry
Appleby, Scott	Cotter	Susser, C. W.	Berryville	Jones, Wm. Edgar	Morrilton
Baldwin, W. S.	Cotter	CHICOT COUNTY		Logan, B. C.	Morrilton
Morrow, J. J.	Cotter	Baker, E.	Dermott	Matthews, E. L.	Morrilton
Thompson, J. I.	Yellville	Barow, E. E.	Dermott	Matthews, J. M.	Morrilton
Tipton, J. T.	Mountain Home	Clark, B. C.	Lake Village	Mobley, H. E.	Morrilton
Tipton, W. C.	Sacaton, Ariz.	Douglas, S. W.	Eudora	Rieff, W. L.	Perryville
Weast, L. M.	Yellville	Fosterling, W. W.	Eudora	CRAIGHEAD COUNTY	
BENTON COUNTY		Hutson, W. J.	Eudora	A'cott, Geo. B.	Weiner
Buffington, G. H.	Gravette	McGehee, E. P.	Lake Village	Altman, J. T.	Jonesboro
Clemmer, J. L.	Gentry	Parr, H. H.	Eudora	Baird, J. L.	Marked Tree
Cox, W. T.	Siloam Springs	Readland, F. E.	Readland	Barrett, R. M.	Black Oak
Crockett, C. S.	Lincoln	Thompson, J. A.	Dermott	Bates, Chas. A.	Lake City
Curry, W. J.	Rogers	Wilson, J. S.	Lake Village	Brown, C. W.	Weiner
Duckworth, F. M.	Siloam Springs	CLARK COUNTY		Burns, R. B.	Jonesboro
Duncan, M. W.	Centerton	Alford, J. E.	Okolona	Cothorn, Thad	Jonesboro
Eubanks, F. G.	Decatur	Bremer, J. P.	Point Cedar	Ellis, Ira W.	Monette
Greene, L. O.	Pea Ridge	Carter, E. E.	Gurdon	*Grady, N. H.	Hot Springs
Gulledge, Jno. F.	Siloam Springs	Doane, S. N.	Arkadelphia	Harrison, B. L.	Trumann
Harrison, A. J.	Lowell	Kirby, D. W.	Gurdon	Hindman, D. S.	Bay
Highfill, E. J.	Cave Springs	Hughes, F. A.	Okolona	Horn, L. D.	Egypt
Hodges, Guy	Rogers	Kirkham, Z. L.	Okolona	Horner, E. J.	Jonesboro
Hodges, T. E.	Rogers	McLain, J. T.	Gurdon	Howell, J. C.	Nettleton
Horton, C. W.	Hiwassee	Moore, J. S.	Arkadelphia	Jackson, W. W.	Jonesboro
Hughes, G. A.	Siloam Springs	Moore, W. M.	Arkadelphia	Lutterloh, Chas. H.	Hot Springs
Ireland, W. W.	Gentry	Ross, H. A.	Arkadelphia	Lutterloh, P. W.	Jonesboro
Koobs, H. J. G.	Rogers	Rowland, W. T.	Arkadelphia	McAdams, H. H.	Jonesboro
Lindsey, J. H.	Bentonville	Townsend, Chas. K.	Arkadelphia	McCracken, C. P.	Jonesboro
Love, Geo. M.	Rogers	Townsend, N. R.	Arkadelphia	McCurry, John H.	Cash
*McHenry, W. A.	Rogers	Wallis, Chas. R.	Arkadelphia	McDaniel, E. C.	Tyrnza
McNeil, Clyde L.	Rogers	Wright, Chas. E.	Gurdon	McDaniel, L. H.	Tyrnza
Maxwell, R. L.	Siloam Springs	CLAY COUNTY		McGinnis, Thos. J.	Sedgwick
Montgomery, Chas. C.	Duenweg, Mo.	Cunning, I. H.	Knobel	Moreland, S. W.	Jonesboro
Moore, W. A.	Rogers	Hiller, J. P.	Pollard	Moreland, W. H.	Tyrnza
Pickens, W. A.	Bentonville	Jones, F. H.	Piggott	Nisbett, Frank	Brookland
Powell, J. T.	Gravette	Latimer, N. J.	Corning	Overstreet, W. C.	Jonesboro
Ramsey, T. C.	Gentry	Lynch, J. P.	Rector	Ramsey, J. W.	Jonesboro
Rice, C. A.	Rogers	Lynch, Richard C.	Success	Ratcliff, R. W.	Jonesboro
*Rice, T. M.	Avoca	McGuire, J. E.	Piggott	Roberts, Fred	Lake City
Scott, L. L.	Siloam Springs	Newkirk, C. H.	Corning	Scott, A. G.	Jonesboro
Smiley, J. L.	Siloam Springs	Parrish, W. O.	Rector	Smith, J. M.	Smackover
Steele, R. W.	Siloam Springs	Richardson, M. C.	Datto	Smith, W. H.	Bono
Thompson, J. S.	Gravette	Shares, C. L.	Peach Orchard	Stroud, H. A.	Jonesboro
Wilson, C. S.	Gentry	*Simpson, A. R.	Corning	Thorn, W. T.	Monette
BOONE COUNTY		Smith, J. E.	Reyno	Tullos, A. M.	Trumann
Blackwood, J. C.	Harrison	Smith, R. O.	Biggers	Verser, W. W.	Harrisburg
Brand, W. M.	Harrison	Thornton, E. W.	Piggott	Waddell, Gracey A.	Bertrand, Mo.
Evans, D. E.	Harrison	Walker, J. W.	Success	Walker, B. F.	Jonesboro
Floyd, G. W.	Western Grove			Willett, R. H.	Jonesboro
Fowler, J. H.	Harrison				
Fowler, T. P.	Harrison				
Gladden, J. G.	Western Grove				

*Deceased.

CRAWFORD COUNTY

Bennett, B. L.	R. F. D. Van Buren
Blakemore, J. E.	Van Buren
Bourland, O. M.	Van Buren
Crigler, J. R.	Alma
Dibrell, M. S.	Van Buren
Galloway, Q. R.	Alma
Grant, S. C.	Mulberry
Hardin, Nina V.	R. 3, Van Buren
Kirkland, Saml. D.	Van Buren
Lucas, Giles	Van Buren
Reves, Wm. R.	Alma
Savery, H. W.	Van Buren
Stewart, Jno. M.	Van Buren
Trice, J. B.	Van Buren
Wigley, J. A.	Mulberry

CRITTENDEN COUNTY

Hammond, C. M.	West Memphis, Ark.
Hare, T. S.	Crawfordsville
Henry, Hugh B.	U.S.V.B., Memphis, Tenn.
Irby, J. T.	Earl
McVay, L. C.	Marion
Matthews, J. H.	Earl
Parker, A. C.	Clarksdale
Stevenson, B. M.	Crawfordsville

CROSS COUNTY

Barner, W. B.	Wynne
Griffin, J. L.	Vandale
Griffin, W. L.	Cherry Valley
Hare, Jacob L.	Wynne
Longest, Ruffin	Wynne
McKie, J. D.	Wynne
McKie, W. H.	Wynne
Miller, J. S.	Parkin
Stewart, Thos. J.	Wynne
Utley, Vernon T.	Parkin
Wilson, Thos.	Wynne

DALLAS COUNTY

Atkinson, H. H.	Fordyce
Cheatham, H. A.	Princeton
Harrison, F. E.	Fordyce
Hope, O. W.	Carthage
Stewart, A. M.	Manning
Taylor, J. E. M.	Sparkman
Wilson, J. F.	Dalark

DESHA COUNTY

Applewhite, R. E.	Watson
Biscoe, Gibbs	Pendleton
DeClark, W. H.	McGehee
Grayson, W. B.	McGehee
Isom, A.	Dumas
Kimbro, C. H.	Tillar
MacCammon, Vernon	Arkansas City
Price, C. C.	Dumas
Smith, H. T.	McGehee
Watts, J. D.	Dumas
White, R. F.	McGehee

DREW COUNTY

Butler, E. D.	Wilmar
Collins, A. S. J.	Monticello
Cotham, E. R.	Monticello
Duckworth, F. L.	Monticello
Gates, S. M.	Monticello
Kimbro, S. O.	Monticello
Lisenbee, A. M.	Sparkman
O'Connor, F. J.	Little Rock
Pope, M. Y.	Monticello
Smith, R. N.	Collins

FAULKNER COUNTY

*Baugh, W. F.	Conway
Benefield, C. E.	Conway
Brown, Geo. S.	Conway
Burnett, M. C.	Wooster
Cureton, H. E.	Conway
Dawson, R. L.	Wooster
Dickerson, C. H.	Conway
Downs, J. H.	Vilonia
Fraser, N. E.	Conway
Hardy, H. B.	Greenbrier
Harrod, George	Conway
Henderson, G. L.	Conway
Huddleston, G. D.	Conway
Ingram, E. M.	Holland
Lieblong, J. S.	Greenbrier
Mabry, Thos.	Holland
McCollum, I. N.	Conway
McDonald, W. T.	Vilonia
McMahan, J. E.	Conway
Munn, J. B.	Vilonia

*Deceased.

FAULKNER COUNTY—Continued

Muse, J. M.	Conway
Watson, T. C.	Mount Vernon
West, W. J.	El Paso
Westerfield, J. S.	Conway

FRANKLIN COUNTY

Akin, W. F.	Branch
Blackburn, E. W.	Ozark
Blakely, T. B.	Coal Hill
Bollinger, W. H.	Charleston
Davis, J. W.	Cass
Douglass, Thos.	Ozark
Gibbons, W. H.	Ozark
Hansberry, A. J.	Ozark
Hodges, E. F.	Branch
Porter, W. C.	Ozark
Post, J. L.	Altus
Williams, H. F.	Stonewall, Okla.

GARLAND COUNTY

Black, T. N.	Hot Springs
Biggs, Orvis	Hot Springs
Brewer, H. W.	Hot Springs
Browne, P. Z.	Hot Springs
Browning, E. R.	Hot Springs
Broyles, S. K.	Hot Springs
Bruce, G. C.	Norphlet
Casada, B. F.	Hot Springs
Chesnutt, Jas. H.	Hot Springs
Clardy, Floyd	Hot Springs
Collings, H. P.	Hot Springs
Connell, W. H.	Hot Springs
Dake, Chas.	Hot Springs
*Davis, R. G.	Bear
Deaderick, W. H.	Hot Springs
Diederich, V. P.	Hot Springs
Drennen, D. Edward	Hot Springs
Drennen, C. Travis	Hot Springs
Eckel, G. M.	Hot Springs
Ellis, L. R.	Hot Springs
Ellsworth, E. H.	Hot Springs
Fletcher, Geo. B.	Hot Springs
Freeman, T. N.	Hot Springs
Garratt, C. E.	Hot Springs
Greene, J. L.	Hot Springs
Holt, Wm. L.	Hot Springs
Jarrell, Foster	Hot Springs
King, Ossian H.	Hot Springs
Klugh, Walter G.	Hot Springs
Knoefel, W. R.	Hot Springs
Lautman, M. F.	Hot Springs
Laws, W. V.	Hot Springs
Lee, D. C.	Hot Springs
McKenzie, E. M.	Hot Springs
Martin, L. G.	Hot Springs
Merritt, J. F.	Hot Springs
Minor, J. C.	Hot Springs
Mobbs, Bert	Honolulu, Hawaii
Moss, Chas. S.	Hot Springs
*Mount, M. F.	Hot Springs
Nims, C. H.	Hot Springs
Parks, Wm. P.	Hot Springs
Pate, C. N.	Hot Springs
Porter, Wm. F.	Hot Springs
Proctor, J. M.	Hot Springs
Purdum, E. A.	Hot Springs
Robertson, J. A.	Hot Springs
Rowland, J. F.	Hot Springs
Sanders, T. E.	Hot Springs
Scully, F. J.	Hot Springs
Sharpe, S. B.	Hot Springs
Shaw, J. B.	Hot Springs
Short, Z. N.	Hot Springs
Simpson, W. F.	Hot Springs
Smith, J. H.	Hot Springs
Smith, Oliver A.	Hot Springs
Smith, W. K.	Hot Springs
Snider, W. L.	Hot Springs
Steele, S. B.	Hot Springs
Stell, J. S.	Hot Springs
Stough, D. B.	Hot Springs
Strachan, J. B.	Hot Springs
Sullivan, A. G.	Hot Springs
Tarkington, Grayson E.	Hot Springs
Tarleton, F. S.	Hot Springs
Thompson, Loyd	Hot Springs
Tillotson, C. H.	Los Angeles, Calif.
Tribble, A. H.	Hot Springs
Vaughan, P. T.	Hot Springs
Wade, H. K.	Hot Springs
Waldrop, J. G.	Hot Springs
Weil, S. D.	Hot Springs
Wenger, O. C.	Hot Springs
Wilkins, J. S.	Hot Springs
Williams, F. M.	Hot Springs
Wootton, W. T.	Hot Springs
Wright, Homer K.	Hot Springs

GRANT COUNTY

Butler, J. L.	Sheridan
Cole, C. F.	Prattsville
Jones, J. E.	Little Rock
Kelly, O. R.	Sheridan
Paxton, Robert L.	Thiel
Sheppard, Irvin	Belfast

GREENE COUNTY

Baker, E. S.	Alexandria, La.
Blackwood, W. J.	Walcott
Boyd, D. L.	R. 6, Paragould
Bridges, G. P.	Paragould
Castleberry, F. L.	Paragould
Clopton, O. H.	Marmaduke
Cohn, Geo.	Piggott
Dickson, P. L.	Paragould
Dillman, James A.	Paragould
Ellington, Edgar	R. 4, Paragould
Ellington, Walter E.	R. 6, Paragould
Ellis, B. E.	Greenway
Haley, R. J.	Paragould
Hardesty, C. A.	Paragould
Hopkins, G. T.	Paragould
Hudgins, J. J.	Marmaduke
Hutcherson, R. L.	Delaplaine
Hutchins, W. P.	Walcott
Lamb, Jones H.	Paragould
Majors, W. M.	Paragould
McKenzie, J. G.	Paragould
Scott, F. M.	Paragould

HEMPSTEAD COUNTY

Allison, Walter G.	Hope
Autrey, J. R.	Columbus
Cannon, G. E.	Hope
Carrigan, P. B.	Hope
Garner, W. M.	Hope
Gentry, J. E.	McCaskill
Harris, R. L.	Hope
Hayes, Chas.	Hope
Lile, L. M.	Hope
Luck, J. L.	Hope
Martindale, Geo. H.	Hope
Robins, Wm. F.	Ozan
Saner, W. F.	Hope
Smith, Don	Hope
Weaver, J. H.	Hope

HOT SPRING COUNTY

Barrier, W. F.	Malvern
Bramlitt, E. T.	Malvern
*Cox, J. A.	Donaldson
Henry, C. A.	Malvern
Hodges, W. G.	Malvern
McCray, E. H.	Malvern
Norton, J. M.	Donaldson
Pharr, J. W.	Malvern
Prickett, Chas.	Malvern
Williams, J. M.	Malvern

HOWARD COUNTY

Alford, T. F.	Murfreesboro
Dildy, E. V.	Nashville
Gibson, W. M.	Nashville
Pravy, J. L.	Dierks
Roberts, J. L.	Nashville
Toland, W. H.	Nashville

INDEPENDENCE COUNTY

Bone, O. L.	Newark
Burge, H. G.	Sulphur Rock
Craig, M. S.	Batesville
Dorr, R. C.	Batesville
Evans, L. T.	Batesville
Gray, C. C.	Batesville
Gray, E. M.	Evening Shade
Gray, F. A.	Batesville
Hinkle, Chas. G.	Batesville
Huskey, J. M.	Moorefield
Jeffrey, Paul H.	Bethesda
Johnston, O. J. T.	Batesville
Kennerly, J. H.	Batesville
King, K. W.	Salado
Laman, G. T.	Cave City
Lawrence, W. B.	Batesville
McAdams, V. D.	Cord
Pascoe, V. L.	Newark
Rice, Wm. M.	Cord
Robertson, S. N.	Sulphur Rock
Rodman, T. N.	Batesville
*Roe, J. B.	Newark
Smith, H. H.	Calico Rock
Woods, O. S.	Salem
Woods, T. J.	Evening Shade
Wyatt, W. A.	Rosie

JACKSON COUNTY

Best, A. L.	Newport
Causy, G. A.	Swifton
Elton, A. M.	Newport
Erwin, Ira H.	Newport
Gray, C. R.	Newport
Harris, M. L.	Newport
Jamison, O. A.	Tuckerman
Kimberlin, K. K.	Tuckerman
Loftin, W. R.	Grubbs
Moore, W. P.	Newport
Morton, R. F.	Swifton
Norris, R. O.	Tuckerman
Owens, M. B.	Amazon
Pierce, W. N.	Tupelo
Stallings, Walker E.	Newport
Stephens, G. K.	Newport
Watson, E. L.	Newport
Wilson, W. F.	R. F. D., Bradford

JEFFERSON COUNTY

Blankenship, W. H.	Pine Bluff
Capel, C. B.	Pine Bluff
Caruthers, C. K.	Pine Bluff
Chavis, W. M.	Pine Bluff
Clark, Oliver Wm.	Pine Bluff
Crump, J. F.	Pine Bluff
Cunningham, T. J.	Pine Bluff
Davidson, J. S.	Pine Bluff
Gill, J. F.	Pine Bluff
Glover, C. A.	Pine Bluff
Gurney, J. O.	Pine Bluff
Hankinson, O. C.	Pine Bluff
Higinbotham, C. J.	Pine Bluff
Hughes, A. A.	Pine Bluff
Jenkins, J. S.	Pine Bluff
John, J. W.	Pine Bluff
Lemons, J. M.	Pine Bluff
Lowe, W. T.	Pine Bluff
Luck, B. D.	Pine Bluff
McMullen, E. C.	Pine Bluff
Palmer, J. T.	Pine Bluff
Pittman, W. G.	Pine Bluff
Pvatt, E. C.	Pine Bluff
Savin, T. L.	Pine Bluff
Scales, J. W.	Pine Bluff
Shelton, M. A.	Wabbaseka
Simmons, Walter H.	Pine Bluff
Smith, S. E.	Pine Bluff
Spillyards, J. S.	Pine Bluff
Tankersley, Grace	Pine Bluff
Troupe, A. W.	Pine Bluff
Vance, J. O.	New Gascony
Vines, C. L.	Pine Bluff
Williams, Harry E., Sr.	Pine Bluff
Woods, R. P.	Alzheimer
Woodul, T. W.	Pine Bluff

JOHNSON COUNTY

Barger, M. I.	Lamar
Boen, A. L.	Clarksville
Boyer, H. L.	Hartman
Bradley, John F.	Lamar
Burgess, M. E.	Pine Ridge, S. D.
Graves, S. M.	Hagarville
Gray, L. C.	Clarksville
Hardgrave, G. L.	Clarksville
*Hays, Annie	Clarksville
Hunt, E. H.	Clarksville
Hunt, Wm. R.	Clarksville
Kolb, J. S.	Clarksville
Love, J. G.	Hartman
Manley, R. N.	Clarksville
Pierce, S. C.	R. 3, Hartman
Stewart, J. J.	Lamar

LAFAYETTE COUNTY

Armstrong, R. L.	Lewisville
Baker, F. E.	Stamps
Hammond, P. L.	Bradley
*Hoover, A. S.	Stamps
McKnight, J. F.	Bradley
Nichols, D. C.	Stamps
Youmans, F. W.	Lewisville

LAWRENCE COUNTY

Allen, Marshall	Walnut Ridge
Ball, C. C.	Ravenden
Clay, A. J.	Hoxie
Guthrie, R. H.	Walnut Ridge
Guthrie, T. C.	Smithville
Hatcher, Wright W.	Imboden
Henderson, A. G.	Imboden
Hughes, J. C.	Hoxie
Johnston, Wm.	Hardy
Land, J. C.	Walnut Ridge
McCarroll, H. R.	Walnut Ridge
Morris, Jas. Wm.	Safford, Ariz.
Necce, T. C.	Walnut Ridge
Robinson, W. J.	Portia

LAWRENCE COUNTY—Continued

Stephens, J. M.	Denmark
*Swindle, J. C.	Walnut Ridge
Townsend, C. C.	Walnut Ridge
Warren, G. A.	Black Rock
Watkins, Geo. Max	Walnut Ridge

LEE COUNTY

Bean, W. B.	Marianna
Beaty, W. S.	R. 1, Aubrey
Bogart, H. D.	Marianna
Crawford, W. S.	Marianna
Chaffin, C. W.	Moro
Ferrell, S. A.	Brickeys
Lewis, John F.	R. 1, Marianna
McLendon, Mac	Marianna
Russwurm, S. C.	Hughes
Wall, E. D.	Marianna
White, H. L.	Rondo
Williamson, O. L.	Marianna
Wilsford, A. L.	Moro

LINCOLN COUNTY

Colquitt, S. W.	Grady
Corney, R. B.	Little Rock
Dixon, Chas. W.	Gould
Hardin, Robt.	Cummins
McClendon, J. M.	Gould
Ringgold, G. W.	Gould
Thiolliere, A. C.	Gould
Wood, G. C.	Grady

LITTLE RIVER COUNTY

Castile, Herman	Foreman
King, Edward R.	Foreman
Nixon, A. M.	Arden
Phillips, Paul H.	Ashdown
Ringgold, J. W.	Ashdown
Vaughan, W. E.	Richmond
York, W. W.	Ashdown

LOGAN COUNTY

Armstrong, N. E.	Booneville
Baker, F. P.	Booneville
Bennett, B. A.	Paris
*Bennett, W. H.	Paris
Harkins, R. A.	Ratcliff
Hederick, Austin R.	Booneville
Keck, H. M.	Keota, Okla.
McConnell, S. P.	Booneville
Smith, A. M.	Paris
Smith, J. J.	Paris
Stewart, John	Booneville

LONOKE COUNTY

Beaty, S. S.	England
Benton, T. E.	Lonoke
Bowers, A. L.	Scott
Brewer, John F.	Kerr
Butler, O. C.	England
Callahan, E. A.	Carlisle
Corn, F. A.	Lonoke
Crowgey, W. B.	Scott
Cunning, John R.	Lonoke
Cunning, John E.	Little Rock
Granberry, G. W.	Little Rock
Harris, Ernest H.	Coy
Kelly, M. D.	Lonoke
Newsom, W. H.	Louann
Rice, Roy	North Little Rock
Scruggs, G. W.	Humnoke
Smith, Harry B.	Keo
Southall, S. A.	Louann
Street, H. N.	Lonoke
Thibault, Henry	Scott
Ward, O. D.	England
Watson, Asa C.	England
Wells, John B.	Scott

MADISON COUNTY

Acree, W. E.	Huntsville
Dixon, C. B.	Kingston
Youngblood, Fred	Huntsville

MILLER COUNTY

Beck, E. L.	Texarkana
Chace, A. E.	Texarkana
Collom, S. A.	Texarkana
Dale, J. R.	Texarkana
Dale, R. E.	Texarkana
Fuller, T. E.	Texarkana
Grant, R. L.	Texarkana
Hays, Geo. A.	Texarkana
Hibbetts, Wm.	Texarkana
Hunt, Preston	Texarkana
Kelly, K. M.	Texarkana
Kitchens, C. E.	Texarkana
Kitchens, W. L.	Texarkana
Kosminsky, L. J.	Texarkana
Kittrell, T. F.	Texarkana

MILLER COUNTY—Continued

Lanier, L. H.	Texarkana
Laws, C. S.	Texarkana
Lee, A. G.	Texarkana
Lennard, F. M.	Texarkana
Longino, H. E.	Texarkana
Mann, R. H. T.	Texarkana
Midd'eton, B. C.	Texarkana
Murry, H. E.	Texarkana
Portwood, O. F.	Texarkana
Smi'ey, H. H.	Texarkana
Smith, C. A.	Texarkana
Smith, J. K.	Texarkana
Watts, E. M.	Texarkana
Webster, H. R.	Texarkana
York, M. N.	Texarkana

MISSISSIPPI COUNTY

Barksdale, Oscar	Wilson
Caldwell, C. A.	Blytheville
Campbell, J. H.	Joiner
Crawford, H. F.	Wilson
Ellis, N. B.	Wilson
Grimmett, W. A.	Blytheville
Harwell, C. M.	Osceola
Hill, E. V.	Blytheville
Hosey, N. R.	Joiner
Hudson, T. F.	Luxora
Husbands, F. L.	Blytheville
Johnson, I. R.	Blytheville
Lowry, S. A.	Kings Mountain, N. C.
Luckett, J. A.	Dell
McCall, W. S.	Blytheville
McRae, Wm.	Blytheville
Martin, S. P.	Blytheville
Massey, L. D.	Osceola
Nall, R. P.	Armored
Owen, Wm. M.	Armored
Power, Paul H.	Pine Bluff
Saiba, J. A.	Blytheville
Sims, H. C.	Burdette
Smith, F. D.	Blytheville
Stevens, C. C.	Blytheville
Stidham, J. H.	Hope
Tidwell, J. L.	Dell
Usrey, Max O.	Blytheville
Waldrop, H. G.	Keiser
Wilson, C. E.	Blytheville

MONROE COUNTY

Boswell, W. L.	Clarendon
Bradford, T. B.	Toone, Tenn.
Bradley, W. T.	Helena
Darnall, Ernest	Holly Grove
Houston, Matt. F.	Clarendon
McKnight, C. H.	Brinkley
McKnight, E. D.	Brinkley
Miller, J. C.	Lepanto
Murphy, F. T.	Brinkley
Murphy, N. E.	Clarendon
Phipps, J. H.	Clarendon
Stout, L. H.	Brinkley
Terry, P. E.	Holly Grove
Thomas, P. E., Sr.	Clarendon

MONTGOMERY COUNTY

Freeman, W. D.	Mount Ida
McLean, J. H.	Caddo Gap
Purtle, C. C.	Graysonia
Robbins, J. D.	Oden
Stueart, J. B.	Womble

NEVADA COUNTY

Buchanan, A. S.	Prescott
Buchanan, G. A.	Prescott
Chastain, J. S.	Prescott
Gee, S. B.	Prescott
Hesterly, J. B.	Prescott
Hesterly, S. J.	Prescott
Hirst, O. G.	Prescott
McDaniel, Thos. W.	Boughton
Mendenhall, T. J.	Rosston
Pool, W. B. H.	Bodcaw
Reeder, A. A.	Emmet.
Rice, W. W.	Prescott

OUACHITA COUNTY

Byrd, E. J.	Bearden
Early, C. S.	Camden
Henry, H. H.	Eagle Mills
Jameson, J. B.	Camden
Mahan, J. M.	Bearden
McGill, S. D.	Camden
McRea, W. T.	Louann
Powell, B. V.	Camden
Purifoy, W. A.	Chidester
Rinehart, J. S.	Camden
Rushing, J. L.	Chidester
Sanders, Geo. P.	Stephens
Thompson, H. F.	Bearden
Thompson, S. A.	Stephens
Word, N. S.	Camden

*Deceased.

PHILLIPS COUNTY

Altman, G. G.	Helena
Baker, J. P.	West Helena
Bean, J. W.	Marvell
Brown, E. T.	Lexa
Bruce, W. B.	Marvell
Butts, J. W.	Helena
Cox, Allen E.	Helena
Cox, Aris W.	Helena
Ellis, J. B.	Helena
Eubanks, G. W.	Wabash
Fink, M.	Helena
*Furbish, L. P.	Mellwood
Henry, Morris	Helena
King, J. A.	Mellwood
King, W. C.	Helena
Kultgen, Edward	Elaine
Miller, C. S.	Helena
Nichols, J. W.	Helena
Norton, Earl F.	Marvell
Orr, W. R.	Helena
Parker, Orlie	Elaine
Rightor, H. H.	Helena
Russwurm, W. C.	Helena
Storm, Geo. R.	West Helena

POLK COUNTY

Campbell, Cyrus A.	Cove
Connally, D. W.	Nashoba, Okla.
Dunman, B. E.	Mena
Fletcher, T. M.	Mena
Hawkins, B. H.	Mena
Hilton, J. G.	Mena
Johnson, C. F.	Hatfield
Lee, F. A.	Vandervoort
Mullins, F. C.	Hatfield
Nelson, C. E.	Cove
Vandiver, W. C.	Mena
Watkins, P. R.	Mena

POPE COUNTY

Berryman, L. D.	Russellville
Britt, J. B.	Russellville
Brooke, Hugh C.	Dardanelle
Campbell, J. M.	Russellville
Cowan, Riley	London
Drummond, H. S.	Russellville
Haney, A. C.	Russellville
Hays, J. F.	Russellville
Hunt, E. C.	Harmony
Irvin, E. C.	Pottsville
Jones, G. W.	Atkins
Linton, A. C.	Hector
Linzy, J. R.	Little Rock
Mason, E. C.	Russellville
Mason, W. L.	Atkins
Miller, J. W.	Gum Log
Montgomery, W. A.	Atkins
Ross, C. J.	Tucker
Rye, Albert W.	Russellville
Scarlett, Wm. P.	Russellville
Smith, R. L.	Russellville
Stanford, J. M.	Russellville
Stroupe, H. V. H.	Russellville
Tate, A. B.	Atkins
Truett, Edward D.	Dover
Webb, G. C.	Russellville
Webb, Floyd, U. S. V. B.	Okla. City, Okla.
Wright, Jerome	Russellville
Yates, G. W.	Scottsville

PRAIRIE COUNTY

Adams, Edward	DeValls Bluff
Crockett, W. H.	Biscoe
Crow, L. M.	Des Arc
Ellis, C. S.	Hazen
Gilliam, J. C.	Des Arc
Hipolite, F. A.	DeValls Bluff
Kitley, J. R.	Mayflower
Lynn, J. R.	Hazen
Parker, Jas.	DeValls Bluff
Parker, Luke	DeValls Bluff
Porter, T. G.	Hazen

PULASKI COUNTY

Arkebauer, C. A.	Little Rock
Bailey, W. E.	Little Rock
Barlow, M. J.	North Little Rock
Barrier, L. F.	Little Rock
Barrett, Jos. E.	Little Rock
Bathurst, Wm. R.	Little Rock
*Bentley, C. E.	Little Rock
Blakely, R. M.	Little Rock
Bradley, F. S.	Dobbs Ferry, N. Y.
Bond, S. P.	Little Rock
Brooks, C. M.	Little Rock
Browning, H. W.	Little Rock
Burns, W. M.	North Little Rock
Calcote, R. J.	Little Rock
Caldwell, Robert	Little Rock

PULASKI COUNTY—Continued

Carruth, O. A.	Little Rock
Carruthers, F. W.	Little Rock
Cheairs, D. T.	Little Rock
Chesnutt, C. R.	Little Rock
Coon, A. B.	Little Rock
Cooper, F. M.	Little Rock
Crawford, J. B.	Little Rock
Crawford, S. R.	Little Rock
Cull, S. T. W.	Little Rock
Cunningham, J. C.	Little Rock
Daly, M. G.	Little Rock
Darnall, R. F.	Little Rock
Davis, E. N.	Little Rock
Davis, J. C.	Little Rock
Day, E. O.	Little Rock
Delaney, J. P.	Little Rock
Dibrell, Jno. R.	Little Rock
Dibrell, Jas. L.	Little Rock
Dickinson, M. F.	Little Rock
Dishongh, H. A.	Little Rock
Dooley, J. B.	Little Rock
Dunaway, W. C.	Little Rock
Eubanks, R. M.	Little Rock
Fly, T. M.	Little Rock
Freedman, Theo.	Little Rock
Freemyer, W. N.	Little Rock
French, F. L.	Little Rock
Fulmer, S. C.	Little Rock
Fulmer, P. M.	Little Rock
Gann, Dewell, Jr.	Little Rock
Garrett, F. H.	Little Rock
Garrison, C. W.	Little Rock
Gray, A. F.	Little Rock
Gray, Oscar	Little Rock
Gray, W. E.	Little Rock
Higgins, Homer A.	Little Rock
Hinkle, S. B.	Little Rock
Hoge, S. F.	Little Rock
Holmes, G. M.	Little Rock
Howell, A. R.	North Little Rock
Howell, Stacy C.	Little Rock
Hudson, E. M.	Little Rock
Humphreys, Lincoln	Paris Island, S. C.
Hurrell, F. E.	Little Rock
Hyatt, D. T.	Little Rock
Jackson, Geo. F.	Little Rock
Jewell, I. H.	Paris
Jobe, A. L.	Little Rock
Johnston, E. E.	Little Rock
Jones, H. F. H.	Little Rock
Jones, I. J.	Little Rock
Jones, O. O.	Little Rock
Jones, W. E.	Little Rock
Judd, O. K.	Little Rock
Junkin, S. P.	R. 4, Little Rock
Kennedy, Jas. Wm.	Philadelphia, Pa.
*King, S. U.	Little Rock
Kinsworthy, J. H.	Little Rock
Kirby, A. C.	Little Rock
Kirk, C. C.	Little Rock
Kory, R. C.	Little Rock
Kriesel, W. A.	Little Rock
Lamb, W. A.	Little Rock
Law, Ralph A.	Little Rock
Lenow, Jas. H.	Little Rock
Lewis, Geo. V.	Little Rock
McCaskill, M. E.	Little Rock
McCormack, G. A.	Little Rock
McNeil, M. P.	Tawaoc, Colo.
McKinney, A. T.	Little Rock
McRae, W. M.	Little Rock
Mahoney, P. L.	Little Rock
Manglesdorf, W. F.	Little Rock
March, C. J.	Fordyce
Matthews, W. M.	Little Rock
May, C. B.	Little Rock
May, W. S.	Little Rock
Meek, Edward	Little Rock
Miller, W. H.	Little Rock
Moore, R. B.	Little Rock
Murphey, Pat	Little Rock
Oates, Charles E.	Little Rock
O'Connor, F. J.	Little Rock
Ogden, M. D.	Little Rock
Parmley, L. V.	Jerome
Patterson, R. Q.	Little Rock
Pemberton, E. M.	Little Rock
Pettus, C. S.	Little Rock
Ponder, E. T.	Little Rock
Pryor, R. E.	Little Rock
Reagan, G. W.	Little Rock
Reagan, L. D.	Little Rock
Reed, C. C.	Little Rock
Rhinehart, B. A.	Little Rock
Rhinehart, D. A.	Little Rock
Richardson, W. R.	Little Rock
Riegler, N. W.	Little Rock
Robinson, F. C.	Little Rock
Rose, W. D.	Little Rock
Runyan, J. P.	Little Rock
Sanderlin, J. H.	Little Rock

PULASKI COUNTY—Continued

Saxon, R. L.	Little Rock
Scarborough, J. I.	Little Rock
Scott, C. V.	Little Rock
Scott, Homer	Little Rock
Sheppard, J. P.	Little Rock
*Shinault, C. R.	Little Rock
Shipp, A. C.	Little Rock
Shuffield, Jos.	North Little Rock
Smith, Morgan	Little Rock
Smith, W. F.	Little Rock
Snodgrass, W. A.	Little Rock
Spitzberg, Irving J.	Little Rock
Stover, A. R.	Little Rock
Strauss, A. W.	Little Rock
Summers, J. A.	North Little Rock
Switzer, D. M.	North Little Rock
Thomas, P. E., Jr.	Little Rock
Thompson, G. D.	Little Rock
Vaughan, Milton	Little Rock
Villars, H. F.	North Little Rock
Vinsonhaler, Frank	Little Rock
Walt, D. C.	Little Rock
Watkins, Anderson	Little Rock
Watkins, John G.	Little Rock
Wayman, A. K.	Little Rock
Wayne, J. R.	Little Rock
Wayne, W. D.	Little Rock
Webb, V. T.	Little Rock
Weny, N. F.	Little Rock
White, E. H.	Little Rock
White, L. W.	Little Rock
Wilkes, E. H.	Little Rock
Witt, Ben M.	Little Rock
Witt, C. E.	Little Rock
Zell, A. M.	Little Rock

RANDOLPH COUNTY

Bayan, Chas. E.	Rock Road
Brown, J. W.	Pocahontas
Finney, Clarence	Maynard
Hamil, W. E.	Pocahontas
Hughes, W. E.	Pocahontas
Hull, Henry B.	Mammoth Spring
Johnson, R. R.	Rt. 1, Walnut Ridge
Johnson, T. Z.	Rt. 1, Walnut Ridge
Loftis, Jno. R.	Maynard
Pace, L. R.	Pocahontas
Ryburn, James W.	Manson
Throgmorton, H. L.	Pocahontas

SALINE COUNTY

Blakely, M. M.	Benton
Buckley, E. A.	Bauxite
Buffington, T. E.	Lonsdale
Burks, J. A.	Traskwood
Davis, W. S.	Owensville
Gann, Dewell, Sr.	Benton
Jones, C. W.	Benton
Phillips, J. M.	Benton
Steed, C. J.	Benton
Walton, Chas. R.	Augusta, Ga.
Walton, J. W.	Benton
Ward, W. W.	Alexander
Wright, J. D.	Mabelvale

SCOTT COUNTY

Bevill, C.	Waldron
Duncan, B. W.	Parks
Duncan, F. R.	Waldron
Duncan, L. D.	Waldron
Jones, Paul	Mound Valley, Ks.
Sorrell, L. B.	Waldron

SEARCY COUNTY

Baker, A. S.	Snowball
Cotton, J. O.	Leslie
Daniel, Sam G.	Marshall
Dickens, G. W.	Leslie
Fendley, E. G.	Leslie
Heard, W. W.	Watts
Henley, J. A.	Marshall
*Hollabaugh, C. B.	Leslie
Melton, A. S.	Marshall
Moore, W. T.	Everton
Roberts, E. E.	Gilbert
Rogers, Wm. F.	St. Joe
Wood, E. W.	Marshall

SEBASTIAN COUNTY

Benefield, J. H.	Huntington
Bevill, S. D.	Fort Smith
Billingsley, C. B.	Fort Smith
Blair, A. A.	Fort Smith
*Brooksher, S. L.	Fort Smith
*Brooksher, W. R.	Fort Smith
Brooksher, W. R., Jr.	Fort Smith
Brown, Elmer J.	Fort Smith
Buckley, J. H.	Fort Smith
Bungart, C. S.	Fort Smith
Carney, Andre B.	Fort Smith

*Deceased.

SEBASTIAN COUNTY—Continued

Chapman, A. S.	Fort Smith
Coffman, J. S.	Lavaca
Cooper, St. Cloud	Fort Smith
Davenport, C. P.	Hartford
Dorente, D. R.	Fort Smith
Dorsey, H. C.	Fort Smith
Eberle, Walter G.	Fort Smith
Foltz, Jas. A.	Fort Smith
Foster, M. E.	Fort Smith
Freer, B. W.	Fort Smith
Gardner, Lycurgus	Fort Smith
Goldstein, D. W.	Fort Smith
Hall, Chas. W.	Greenwood
Harvey, John H.	Fort Smith
Hoge, A. F.	Fort Smith
Holt, C. S.	Fort Smith
Hynes, Geo. F.	Fort Smith
Jeffery, T. E.	Fort Smith
Johnson, Hugh	Fort Smith
Johnson, J. E.	Fort Smith
Jones, E. B.	Hartford
Jones, I. Fulton	Fort Smith
Kennedy, C. H.	Fort Smith
King, H. C.	Fort Smith
Klingensmith, W. R.	Fort Smith
Little, J. E.	Fort Smith
McCormack, N. D.	Fort Smith
McKelvey, A. A.	Fort Smith
Means, C. S.	Fort Smith
Moulton, E. C.	Fort Smith
Moulton, H.	Fort Smith
Riddler, P. A.	Fort Smith
Rose, Willis F.	Fort Smith
*Scott, E. E.	Fort Smith
Smith, H. H.	Fort Smith
Southard, J. D.	Fort Smith
Southard, J. S.	Fort Smith
Stubbs, S. P.	Fort Smith
Taylor, J. M.	Fort Smith
Thompson, H. B.	Fort Smith
Ware, Bertram L.	Greenwood
Wilson, Cons P.	Fort Smith
Wolfermann, S. J.	Fort Smith
Woods, G. G.	Huntington
Wyatt, R. B.	Fort Smith

SEVIER COUNTY

Anderson, J. B.	Ben Lomond
Archer, C. A.	DeQueen
Baird, W. G.	Dierks
Clingan, A. J.	DeQueen
Graves, J. C.	Lockesburg
Hendricks, J. S.	DeQueen
Hendrix, B. E.	Gillham
Hopkins, R. L.	DeQueen
Kennedy, J. R.	DeQueen
Kitchens, C. E.	Texarkana
Norwood, M. L.	Lockesburg
Smith, E. D.	Gillham

ST. FRANCIS COUNTY

Bogart, J. A.	Forrest City
Boggan, P. P.	Forrest City
Brown, J. T.	Forrest City
Ca'dwell, A. B.	Caldwell
Chaffin, E. J.	Hughes
McClendon, H. L.	Palestine
McCown, N. C.	Forrest City
McDougal, J. F.	Forrest City

*Deceased.

ST. FRANCIS COUNTY—Continued

Oliver, R. E.	Widener
Powell, Clyde V.	Round Pond
Proctor, F. L.	Forrest City
Rush, J. O.	Forrest City
Scott, Chas. S.	Colt
Winter, W. A.	Widener

UNION COUNTY

Brewer, J. M.	El Dorado
Burns, R. P.	El Dorado
Bush, T. J.	El Dorado
Carter, C. J.	Pampa, Texas
Cathey, A. D.	El Dorado
Center, W. B.	Norphlet
Coleman, J. S.	Wichita, Kansas
DeBolt, G. C.	Louann
Elkins, W. N.	Junction City
Engle, C. G.	El Dorado
Falvey, J. C.	El Dorado
Ferguson, J. V.	El Dorado
Fincher, L. G.	Wesson
George, I. M.	El Dorado
Guthrey, J. E.	El Dorado
Hancock, W. G.	Alikchi, Okla.
Harper, Wm. L.	Junction City
Irby, Frank L.	Wesson
Lisenby, J. O.	Smackover
McCall, Daniel	Lawson
McGraw, S. J.	El Dorado
McKinney, A. B.	Junction City
Mahony, F. O.	El Dorado
Mayfield, A. M.	El Dorado
Mayfield, H. F.	Huttig
Mitchell, J. G.	El Dorado
Moore, J. A.	El Dorado
Morgan, T. M.	El Dorado
Munn, E. J.	El Dorado
Murphy, Geo. D.	El Dorado
Murphy, G. W. T.	Strong
Niehuss, H. H.	El Dorado
Patterson, W. L.	El Dorado
Purifoy, L. L.	El Dorado
Russell, M. V.	El Dorado
Sheppard, J. K.	El Dorado
Sheppard, J. M.	El Dorado
Slaughter, J. W.	El Dorado
Strange, W. W.	Smackover
Tanner, J. F.	El Dorado
Thompson, E. L.	El Dorado
Thrower, W. W.	El Dorado
Vines, F. P.	El Dorado
Wharton, J. B.	El Dorado
White, D. E.	El Dorado
Wilson, Paul W.	Huttig
Wozencraft, W. L.	El Dorado

WASHINGTON COUNTY

Batchelder, F. P.	Farmington
Callen, C. B.	Fayetteville
Callen, L. H.	Fayetteville
Cannon, J. S.	West Fork
Cooper, T. L.	Elm Springs
Curry, Wm.	Cane Hill
Ellis, E. F.	Fayetteville
Gilbert, A. A.	Fayetteville
Gregg, A. S.	Fayetteville
Harr, H. T.	Fayetteville

WASHINGTON COUNTY—Continued

Hathcock, P. L.	Fayetteville
Henry, R. T.	Springdale
McCormick, E. G.	Prairie Grove
Martin, J. E.	Springdale
Miller, Otey	Fayetteville
Mock, W. H.	Prairie Grove
Moore, A. I.	Fayetteville
Morrow, F. R.	Fayetteville
Paddock, C. B.	Fayetteville
Roberts, D. C.	Fayetteville
Sisco, C. P.	Springdale
Swift, Chas. E.	Elkins
Walker, J. W.	Fayetteville
Wood, H. D.	Fayetteville

WHITE COUNTY

Abington, E. H.	Beebe
Abington, W. H.	Beebe
Allbright, S. J.	Searcy
Brewer, T. E.	Beebe
Burge, T. G.	Judsonia
Clark, W. A.	Bald Knob
Evans, A. A.	Bald Knob
Felts, W. R.	Judsonia
Hardy, F. P.	Center Hill
Harrison, A. G.	Searcy
Hassell, J. W.	Searcy
Havner, J. B.	Beebe
Henderson, T. W.	Judsonia
Hudgins, A. H.	Griffithville
Jones, J. L.	Searcy
Little, R. L.	Judsonia
McAdams, J. C.	Pangburn
Moore, L. E.	Searcy
Peeler, C. M.	Pangburn
Purnell, F. L.	Kensett
Runyan, J. R.	Searcy
Sloan, Dewey W.	Beebe
Sloan, J. R.	Garner
Spain, A. L.	Letona
Tapscott, S. T., Jr.	Searcy
Woodyard, W. H. L.	Judsonia

WOODRUFF COUNTY

Biles, L. E.	Augusta
Brewer, E. F.	Augusta
Brewster, B.	McCrory
Brown, E. B.	Cotton Plant
Danner, J. J.	McClelland
Dungan, C. E.	Augusta
Finch, Carl	McCrory
Fraser, R. L.	McCrory
Gephart, R. T.	Cotton Plant
Maguire, F. C.	Augusta
Monroe, U. S.	Hunter
Morris, J. W.	McCrory
Osborne, J. M.	Howell
Porter, M. A.	Hunter
Smith, R. N.	Pine Bluff
West, J. H.	Grays

YELL COUNTY

Gillum, A. D.	Rover
Linzy, C. B.	Plainview
Montgomery, H. L.	Gravelly
Pool, Thos. J.	Ola

Book Reviews

New and Nonofficial Remedies, 1926—Containing descriptions of the articles which stand accepted by the Council on Pharmacy and Chemistry of the American Medical Association on Jan. 1, 1926. Cloth. Price, postpaid, \$1.50. Pp. 459, XLIII. Chicago: American Medical Association, 1926.

New and Nonofficial Remedies is the publication of the Council on Pharmacy and Chemistry through which this body annually provides the American medical profession with disinterested critical information about the proprietary medicines which are offered

to the profession and which the Council deems worthy of recognition.

An examination of the preface shows that in addition to inclusion of the new drugs which were accepted during the past year, the book has been extensively revised. Many of the preparations listed in the previous edition have been omitted and the descriptions of others have been revised to bring the statements into accord with present day knowledge. Among the products that were accepted during the past year and which are included in the new edition are scarlet fever toxin prep-

arations used to determine susceptibility or to establish immunity and curative scarlet fever antitoxin; a parathyroid extract of determined effect on the calcium content of the blood serum; two antimony compounds for use in trypanosomic infections; tryparsamide, developed in the Rockefeller Institute for Medical Research; tetraiodophthalein sodium for the visualization of the gall-bladder and hexylresoreinol developed by Veader Leonard.

The book contains a cumulative appendix (printed on buff paper), which is a list of references to reports of the Council and to other publications dealing with articles not described in New and Nonofficial Remedies. This appendix is thus a valuable and quite extensive bibliography of proprietary and unofficial preparations.

In reference to the work of the Council on Pharmacy and Chemistry, the Board of Trustees of the American Medical Association in their report to the House of Delegates stated that the success of the Council's endeavors will depend less on the work done by the Council than on the support that is given by the rank and file of the medical profession and that this support can be most efficiently given by physicians (and with fullest justice to themselves and their patients) by confining their use of proprietary medicines to those that have been found acceptable for inclusion in New and Nonofficial Remedies. The physician who desires to support the Council actively should therefore obtain a copy of the 1926 edition. Every physician has need for a book of reference such as this volume to which he may turn for trustworthy information with regard to proprietary medicines.

A Manual of Normal Physical Signs—By Wyndham B. Blanton, B. A., M. A., M. D., Richmond, Virginia, Associate in Medicine, Medical College of Virginia. Published by the C. V. Mosby Company, St. Louis, 1926. Price \$2.50.

This book presents a brief compilation of normal findings in the healthy individual. It should prove to be of valuable aid to the practicing physician, as well as for class room instruction.

Annual Reprint of the Reports of the Council on Pharmacy and Chemistry of the American Medical Association for 1925.—Cloth. Price, postpaid, \$1.00. Pp. 90. Chicago: American Medical Association, 1926.

This volume contains the reports of the Council on Pharmacy and Chemistry that have been adopted and authorized for publication during 1925.

The annual volumes of the "Council Reports" may be looked upon as the companion volumes to New and Nonofficial Remedies. While the latter describes the medicinal preparations that are found acceptable, the former contain reports on the products that were not accepted. The present volume contains reports on the following products which the Council denied admission to New and Nonofficial Remedies: Agrilin; Benzyl Viburnum Compound; Bichloridol and Salicidol; "Colloidal Gold;" Diabesan; F. & R's Genuine Gluten Flour; Geroxide; Hoyt's Gluten Bran Flakes; Horse Dung Allergen-Squibb, House Dust Allergen-Squibb, Lepage's Glue Allergen-Squibb and Street Dust Allergen-Squibb; Incitamin; Liposan; Loeser's Intravenous Solution of Calcium Chloride; Loeser's Intravenous Solution of Sodium Thiosulphate; Mercodel; Orargol; Parathyroid with Calcium; Pollen Extract Graminae, Pollen Extract Chenopodiaceae, Pollen Extract Ambrosiaceae and Pollen Extract Artemisias-P. D. & Co.; Rayminol; Rheumecz; Mitysol; Some Wagner's Preparations; Tablets Calcreose with Iodine; Digifortis; Trepol and Neotrepol; Tricalcine; Viriligen, Glandular Comp. and Pineal Comp.; Vitalait (Vitalait Laboratory, Inc., Newton Centre, Mass.) and Vitanol.

The volume also contains reports on products which were included in former editions of New and Nonofficial Remedies but which will not appear in the 1926 edition because they were found ineligible for further recognition.

The volume contains reports of a general nature: for instance a report on the use and utility of digestive enzymes in therapeutics and a preliminary report on spleen and red bone marrow.

Physicians who keep fully informed in regard to the value of proprietary remedies will wish to own this book.

The Thyroid Gland.—By Charles H. Mayo, M. D., Professor of Surgery, University of Minnesota, Mayo Foundation, Rochester, Minn., and Henry W. Plummer, M. D., Professor of Medicine, University of Minnesota, Mayo Foundation, Rochester, Minn. Published by the C. V. Mosby Company, St. Louis, 1926. Price \$1.75.

In this small volume the authors present in Part One, "The Thyroid Gland" and in Part Two, describe "The Functions of the Thyroid Gland." The completeness and the sound judgment shown in this book can be more greatly appreciated by the knowledge that the Mayo Clinic has been favored in having

the largest group of thyroid cases ever assembled during a period of thirty-three years. This group, numbering 22,728 cases, required 30,628 operations.

Abstracts

GANGRENE OF ARM AND DEATH FOLLOWING HYPODERMIC INJECTION

Marks M. Shaine, New York (Journal A. M. A., Sept. 18, 1926), says that as the result of the high pressure salesmanship methods of some pharmaceutic houses, the use of hypodermic and intravenous medication is growing by leaps and bounds. Some physicians have almost discarded prescription blanks, and their offices are veritable stock rooms filled with hundreds of ampules of various kinds. That there is real danger in needle administration of drugs is proved by the cases of Tennant and of Doane. The case described by Shaine is similar and warrants the warning not only to use the same strict asepsis in administering a hypodermic injection that one would use in a major operation, but also not to use hypodermic or intravenous medication except with those drugs which have little or no effect when administered by mouth. A woman, aged 32, married, complained of weakness and lassitude. Her physician found a moderate anemia and advised a series of hypodermic injections of a preparation of arsenic. Twelve injections were given with apparently good effect. After a time the symptoms returned and a new course of injections was started. Thirty-six hours after the first injection in the second series, the patient complained of pain at the site of the injection in the left deltoid region, and noted a small area of redness. The redness and pain increased, and the temperature was between 101 and 104 F. A diagnosis of erysipelas was made. The redness continued to spread until it reached almost to the wrist. The fever continued high and the patient looked quite ill. On the seventh and eighth days, large incisions were made in the arm and forearm; no pus pockets were found, but the tissue was necrotic and seropus oozed from the incision. On the ninth day the arm became gangrenous; high amputation was performed after a transfusion had been given. The patient died about two hours after the operation.

ST. JOHN'S HOSPITAL

Fort Smith, Arkansas



Conducted by

HOLT CLINIC

DR. CHAS. S. HOLT

Chief of Staff

Dr. L. Gardner

Dr. H. C. Dorsey

Dr. J. E. Little

Dr. J. H. Harvey

Dr. C. B. Billingsley

Dr. R. O. Bruton

RADIUM

Sufficient for All Treatment

Long Distance Phone
Fort Smith 1581



D-ZERTA is a sugar-free jelly powder, which simply by the addition of boiling water and subsequent cooling yields a tempting fruit flavored jelly. D-Zerta is appetizing in appearance, of appealing aroma and agreeable to the palate; a most delicious dessert especially recommended for the diet in diabetic and obesity cases.

20 SERVINGS—\$1.00

Assorted flavors in each package

THE JELL-O COMPANY, Inc.

Le Roy, N. Y.

Bridgeburg, Can.

D=Zerta
A Sugar-free Dessert

The Secretary of the County Society will please notify the State Secretary immediately of any error or change in these officers.

DIRECTORY

OF THE

COUNTY SOCIETIES OF THE ARKANSAS

MEDICAL SOCIETY

1926

COUNTY	PRESIDENT	ADDRESS	SECRETARY	ADDRESS
ARKANSAS	Chas. E. Park	DeWitt	Homer Dickens	Dewitt
ASHLEY	W. S. Norman	Hamburg	L. C. Barnes	Hamburg
BAXTER	J. I. Thompson	Yellville	J. J. Morrow	Cotter
BENTON	F. G. Eubanks	Decatur	H. J. G. Koobs	Rogers
BOONE	John M. Wallace	Harrison	D. L. Owens	Harrison
BRADLEY	W. T. Fike	Warren	Rufus Martin	Warren
CALHOUN	C. T. Black	Thornton	T. F. Rhine	Thornton
CARROLL	A. L. Carter	Berryville	R. H. Huntington	Eureka Springs
CHICOT	S. W. Douglas	Eudora	E. E. Barlow	Dermott
CLARK	J. P. Bremer	Point Cedar	H. A. Ross	Arkadelphia
CLAY	A. R. Simpson	Corning	M. C. Richardson	Datto
CLEBURNE				
CLEVELAND	A. J. Hamilton	Rison	H. O. Wilson	Rison
COLUMBIA	J. J. Baker	Magnolia	P. M. Smith	Magnolia
CONWAY	W. E. Jones	Morrilton	E. L. Mathews	Morrilton
CRAIGHEAD	John H. McCurry	Cash	Thad Cothern	Jonesboro
CRAWFORD	M. S. Dibrell	Van Buren	O. M. Bourland	Van Buren
CRITTENDEN	T. S. Hare	Crawfordsville	L. C. McVay	Marion
CROSS	T. J. Stewart	Wynne	Thos. Wilson	Wynne
DALLAS	J. Y. Smith	Sparkman	J. E. M. Taylor	Sparkman
DESHA	R. E. Applewhite	Watson	H. T. Smith	McGehee
DREW	M. Y. Pope	Monticello	A. S. J. Collins	Monticello
FAULKNER	G. L. Henderson	Conway	J. S. Westerfield	Conway
FRANKLIN	W. C. Porter	Ozark	Thos. Douglass	Ozark
GARLAND	C. E. Garratt	Hot Springs	O. H. King	Hot Springs
GRANT	C. F. Cole	Prattville	O. R. Kelly	Sheridan
GREENE	W. J. Blackwood	Walcott	F. M. Scott	Paragould
HEMPSTEAD	G. E. Cannon	Hope	W. G. Allison	Hope
HOT SPRING	E. T. Bramlitt	Malvern	W. G. Hodges	Malvern
HOWARD	J. S. Hopkins	Nashville	D. A. Hutchinson	Nashville
INDEPENDENCE	O. S. Woods	Salem	M. S. Craig	Batesville
JACKSON	C. R. Gray	Newport	M. L. Harris	Newport
JEFFERSON	W. G. Pittman	Pine Bluff	A. A. Hughes	Pine Bluff
JOHNSON			E. H. Hunt	Clarksville
LAFAYETTE	D. C. Nichols	Stamps	F. W. Youmans	Lewisville
LAWRENCE	C. C. Townsend	Walnut Ridge	T. C. Guthrie	Smithville
LEE	O. L. Williamson	Marianna	W. B. Bean	Marianna
LINCOLN	J. M. McClendon	Gould	S. W. Colquitt	Grady
LITTLE RIVER	W. W. York	Ashdown	W. E. Vaughan	Richmond
LOGAN				
LONOKE	Ernest Harris	Coy	Henry Thibault	Scott
MADISON	W. E. Acree	Huntsville	Fred Youngblood	Huntsville
MARION				
MILLER	A. E. Chace	Texarkana	Preston Hunt	Texarkana
MISSISSIPPI	R. P. Nall	Armored	F. D. Smith	Blytheville
MONROE	C. H. McKnight	Brinkley	W. L. Boswell	Clarendon
MONTGOMERY	W. D. Freeman	Mount Ida	J. D. Robbins	Oden
NEVADA	W. W. Rice	Prescott	O. G. Hirst	Prescott
OUACHITA	B. V. Powell	Camden	J. B. Jameson	Camden
PERRY				
PHILLIPS	W. C. Russwurm	Helena	M. Fink	Helena
POINSETT				
POLK	B. H. Hawkins	Mena	F. C. Mullins	Grannis
POPE	H. V. H. Stroupe	Russellville	Wm. P. Scarlett	Russellville
PRAIRIE	James Parker	De Valls Bluff	J. R. Lynn	Hazen
PULASKI	M. E. McCaskill	Little Rock	R. J. Calcote	Little Rock
RANDOLPH	R. R. Johnson	Walnut Ridge	H. L. Throgmorton	Pocahontas
SALINE	W. S. Davis	Owensville	J. M. Phillips	Benton
SCOTT	C. Bevell	Waldron	F. R. Duncan	Waldron
SEARCY	E. G. Fendley	Leslie	Sam. G. Daniel	Marshall
SEBASTIAN	N. D. McCormack	Fort Smith	J. S. Southard	Fort Smith
SEVIER	B. E. Hendrix	Gillham	J. C. Graves	Lockesburg
ST. FRANCIS	A. B. Caldwell	Caldwell	J. O. Rush	Forrest City
UNION	D. E. White	El Dorado	E. J. Munn	El Dorado
WASHINGTON	C. P. Sisco	Springdale	P. L. Hathcock	Fayetteville
WHITE	A. G. Harrison	Searcy	Sam. J. Allbright	Searcy
WOODRUFF	J. M. Osborne	Howell	L. E. Biles	Augusta
YELL	H. L. Montgomery	Gravelly	C. B. Linzy	Plainview

THE JOURNAL

OF THE

Arkansas Medical Society

PUBLISHED MONTHLY UNDER THE DIRECTION OF THE COUNCIL

Vol. XXIII.

LITTLE ROCK, ARK., DECEMBER, 1926

No. 7

Original Articles

TRICHINOSIS*

W. G. PITTMAN, M. D. Pine Bluff

Trichinosis has been known to be a parasitic disease of man since 1860 when Zenker definitely connected the trichinae found encysted in the muscles of the hog and other animals with clinical trichinosis in man. He proved his statements with experimental evidence.

Many animals have been found to be hosts of this parasite, but the hog and the rat are the most common carriers. It has been estimated that two to five per cent of the hogs of this country are infected. Fowls seem to be immune under normal conditions.

The trichinella spiralis is a member of the family of nematodes and is the smallest one with the exception of strongyloides intestinalis. When infected meats are ingested, the digestive juices liberate the larvae, which mature in three to four days in the small intestine. Fertilization takes place here, but before delivering the embryos, the female penetrates the intestinal mucosa and delivers her brood of about 1,500 larvae, which migrate through the lymphatic capillaries to the thoracic duct. At this time, which is the end of the first week after the ingestion of infected meat, the embryos may be found in the blood and the lymph, but later they are disseminated over the entire body. Although they have a predilection for voluntary muscles, cases have been reported where the larvae have been found in the peritoneal cavity and the cerebro-spinal fluid. When they reach the muscle tissue they enter the sarcolemma causing an inflammatory reaction and a local atrophy of the muscle fibers. A fibroplastic material is thrown out of the tissues to embed them. After entering this so-called period of encystment, the embryos increase in size, become sexually

differentiated and as such remain viable for years. In some animals the cysts become calcified and later absorbed. Usually the infected meat does not show any gross change; however, when the cysts become calcified, they may appear as minute white points in the muscle tissue.

VITAL RESISTANCE. The encysted trichinae show a great resistance toward putrefaction, and may retain their vitality in putrefactive meats for ten to twelve weeks. Even prolonged ordinary refrigeration temperature does not effect them. However, subjecting them to 3 to 5 degrees F. for ten to twelve days will destroy them. Hence the federal government requires that meat products, which are ordinarily eaten raw, be kept for twenty days not exceeding 11 degrees F. The thermal death point of the encysted larvae is fifteen minutes at 56 degrees C. for thin pieces of meat and small sausages; but requires from 3 to 3.5 hours to bring about their destruction in the central portion of meat in mass such as ham. At the boiling point it requires from thirty minutes to one hour, depending on the thickness of the piece. The proper curing of meats containing pork and pork products offers a safeguard, because if carried out according to the regulations of the Department of Agriculture, it will devitalize the trichinae.

There seems to be no immunity in trichinosis. It has been demonstrated that a previously infected animal will be reinfected, if some of its own muscle is excised and fed to it. Wells and others have observed a positive complement fixation reaction when an extract of macerated larvae is used as antigen. They think this reaction is due to the production of a specific antitoxin by the host to neutralize the toxic metabolic products of the parasite. Furthermore, the toxin, as in the case of all intestinal parasitic infections, with the exception of dysentery, induces a positive chemotactic reaction for eosinophiles. Of all the known parasites to which man is suscep-

*Read before the Fifty-First Annual Meeting of the Arkansas Medical Society, Hot Springs, May 18-20, 1926.

tible, trichinosis causes the highest eosinophilia. The degree of resistance offered by the host seems to be directly proportional to the number of eosinophiles per c mm. of blood. Thus, mild cases show a hypereosinophilia, while in severe cases the eosinophiles may be as low as 8 per cent. A moderate leukocytosis usually accompanies the eosinophilia. Following recovery, even after the total count has become normal, the differential count usually shows an increase in eosinophiles for several months. From the standpoint of hematology and diagnosis as much attention should be paid to eosinophilia as to neutrophilic leukocytosis. In reviewing the literature on trichiniasis, we found some authors say that the disease is widespread. No doubt hundreds of cases, occurring sporadically and endemically, have been overlooked and mistaken for various other diseases.

From the standpoint of prophylaxis the danger of feeding uncooked pork to hogs, dogs, cats and other carnivorous animals can not be too strongly emphasized. Another lamentable common practice among the farmers is to leave the carcasses of animals to putrefy and be consumed by buzzards, or any animal which feeds on putrefactive meats. Nothing could be more pernicious than this procedure, since it has been fully demonstrated that putrefaction does not destroy the trichinae.

Clinically, from the standpoint of symptomatology and pathology trichinosis may be divided into three periods. First, the week following the ingestion of trichinous meat, when maturation of the worm takes place in the intestine. Second, that of the dissemination of the larvae from the intestinal lymphatics throughout the general circulation embracing about ten to twelve days; and, third, the encystment of the larvae in the muscular tissues.

The first period is characterized by gastrointestinal disturbances, anorexia, nausea, vomiting, malaise, abdominal pains and usually diarrhea which is not easily controlled. Toward the end of the first week a slight edema of the eyelids and the face may be noticed accompanied with general muscular tenderness.

With the beginning of the second week, as the parasites begin to invade the muscles, myositis is developed, its intensity depending on the severity of the infection. This causes swelling of the face, chest and limbs and a tenderness which renders muscular action

rather difficult. In some cases where the pharynx and the larynx are effected dysphagia, hoarseness, or even aphonia may develop. The temperature is either of a remittent or an intermittent type. Although slight in mild cases, in severe cases it may go as high as 103 or 104, and may be accompanied with chills, rigors and sweats. Toward the end of this stage the edema becomes more pronounced, with increased tenderness of all the invaded muscles.

During the third week or the period of encystment, in severe cases there is marked anemia and cachexia. Also a drop of temperature by lysis, and a lessening of the edema in general is noticed. There is still a marked tenderness of all muscular tissues, though the patient may flex the forearms and legs to relieve muscular tension.

During the first of February, this year, we were confronted with three cases in the family of a shop worker, which proved very puzzling and we were unable to make a diagnosis for nearly two weeks. It was apparent, however, that the cases were very unusual. Our attention was focused on the gastrointestinal disturbances which were predominant in all of them. Errors in diet were considered, but their history indicated nothing to account for it. Ptomains and arsenical poisonings were considered, but they could be ruled out on account of the different dates on which the patients were affected.

REPORT OF CASES

Case No. 1. Mrs. J. H. S., age 25, a housewife, had had the usual diseases of childhood, and typhoid fever in September, 1922, with no complications following. She was married at the age of 16 and was the mother of two children, ages 7 and 8 respectively, both of whom were normal. Her venereal history was negative, also her nose, throat, ears and teeth were normal.

She had been well until February 3rd when she developed a violent gastro-enteritis which lasted a week. During this time she had abdominal pains, nausea, vomiting and a diarrhea which was very distressing and not relieved by any medicinal treatment. When the diarrhea subsided, there was a tendency toward constipation, but the nausea and the vomiting persisted until the end. During this time her pulse was feeble and ranged from 100 to 120 with a normal and subnormal temperature.

MRS. J. H. SHEPHERD

Table No. 1, Blood Findings in Case No. 1

Date 1926	Total Leuco.	Polynuclear Neutrophiles	Eosino- philes	Lymphocytes		Mononuclears and Transitionals	Myelo- cytes
				Small	Large		
2- 8	7,200	68	2	21	6	3	0
2-12	8,200	70	5	20	5	0	0
2-16	12,600	71	9	10	3	4	3
2-18	13,300	75	11	5	3	3	3
2-22	15,200	70	17	5	2	2	4

Table No. 2, Urine Analyses in Case No. 1

Date 1926	Sp. Gr.	Alb.	Sugar	Indican	Hyal.	Casts		Pus	Blood	Diazo.
						Gran.				
2-12	1.015	Neg.	Neg.	Neg.	None	None		Few	None	Neg.
2-16	1.021	Trace	Neg.	X	Few	Few		XX	None	Pos.
2-19	1.020	XX	Trace	XX	X	XX		XX	Occas.	Pos.
2-22	1.031	XXX	XX	XXXX	XX	XXX		XXX	Few	Pos.

ETHEL SHEPHERD

Table No. 3, Blood Findings in Case No. 2

Date 1926	Total Leuco.	Polynuclear Neutrophiles	Eosino- philes	Lymphocytes		Mononuclears and Transitionals	Myelo- cytes
				Small	Large		
2-12	9,000	68	2	16	8	6	0
2-16	9,800	69	8	11	7	5	0
2-19	14,500	72	10	8	6	4	0
2-22	15,100	76	10	8	2	2	2
3- 3	16,600	63	9	18	5	5	0
3-26	17,200	60	16	14	7	3	0
4- 8	9,700	68	8	11	9	4	0
5-10	7,250	62	6	15	13	4	0

Table No. 4, Urine Analyses of Case No. 2

Date 1926	Sp. Gr.	Alb.	Sugar	Indican	Hyal.	Casts		Pus	Blood	Diazo.
						Gran.				
2-12	1.015	Neg.	Neg.	Neg.	None	None		Occas.	None	Neg.
2-16	1.021	Neg.	Neg.	SI. Tr.	Occas.	None		Few	None	Neg.
2-22	1.017	X	X	Trace	XX	Few		XX	Few	Pos.
2-25	1.020	XX	XX	Pos.	XX	XX		Few	Few	Pos.
3- 3	1.019	XX	X	Trace	XX	Few		XX	Occas.	Trace

MANLEY SHEPHERD

Table No. 5, Blood Findings in Case No. 3

Date 1926	Total Leuco.	Polynuclear Neutrophiles	Eosino- philes	Lymphocytes		Mononuclears and Transitionals	Myelo- cytes
				Small	Large		
2-12	7,800	65	0	24	6	5	0
2-16	10,400	69	10	8	7	6	0
2-19	16,100	73	10	7	6	4	0
2-22	18,000	69	14	6	6	5	0
3- 3	14,300	76	14	6	3	1	0
3-25	11,000	50	26	18	4	2	0
4- 8	9,600	60	17	14	6	3	0
5-10	7,800	55	11	29	3	2	0

Table No. 6, Urine Analysis of Case No. 3

Date 1926	Sp. Gr.	Alb.	Sugar	Indican	Hyal.	Casts		Pus	Blood	Diazo.
						Gran.				
2-12	1.009	Neg.	Neg.	Neg.	None	None		Occas.	None	Neg.
2-19	1.022	X	X	Trace	Few	Few		X	None	Pos.
2-22	1.016	XX	XX	Neg.	X	Few		XX	None	Pos.
2-25	1.014	X	Trace	Neg.	Few	Few		X	None	Trace
3- 3	1.020	Neg.	Neg.	Neg.	Few	None		Few	None	Trace

About the eighth day an edema was noticed commencing in the eyelids and the face and soon extended over the entire body. Coincident with this edema there was a tenderness and a soreness of all the muscles of the extremities, the intercostals and pharynx. The temperature, which was remittent in type, ranged from 100 in the mornings to 101 or 102 in the afternoons. Within the next three or four days the patient became very uncomfortable and experienced acute pain with the slightest movement either active or passive. She assumed a position with her forearms and legs flexed and was unable to turn herself in bed. Respiration was normal until the 11th day, at which time it became thoracic and rapid, averaging between 25 and 30. On the 16th day she developed dyspnea and dysphagia, which persisted until her death. The chest was otherwise negative with the exception of a mitral murmur during the early course of her illness. From the 10th to the 18th day her pulse gained volume and decreased in rate, ranging from 100 to 112; but during the last 48 hours it became accelerated and feeble.

The blood findings were normal till the 9th day, after which they showed a gradual increase in eosinophiles and in the total leucocyte counts. The blood findings are shown in table No. 1. No pathological changes were noticed in the urine until after the 12th day, but thereafter albumen, traces of sugar, many casts and few red cells were found as shown in table No. 2. After her death on the 20th day, a piece of the muscle tissue removed from the tendinous insertion of the deltoid showed numerous unencysted trichinal larvae.

Case No. 2. Ethel S., age 8, a school girl who had the usual diseases of childhood, was normal and well developed. Had been well until February 7th, when she suffered from a gastrointestinal disturbance for three or four days, during which time she was very uncomfortable on account of nausea, vomiting and diarrhea. Her pulse was from 120 to 130 with a normal and subnormal temperature, while her respiration was around 22. At the end of the first week a puffiness of the eyes and face was noticed, accompanied with an afternoon rise of temperature. Within the next twenty-four hours the edema extended over the entire body with muscular soreness of the limbs, chest and neck. During the following week the muscles of the extremities became markedly swollen rendering movement

very difficult. Rotation of the head was also painful as well as mastication.

From the fifteenth to the twentieth day her temperature gradually rose to 103 in the afternoons with a morning remission of about 100. It declined thereafter, but was not clear till the end of the seventh week. During the third and fourth weeks her respiration varied from 26 to 32. The patient became very anemic and cachectic during the latter part of the febrile period, and had a slow convalescence. The muscular symptoms did not clear up before the ninth week; even at present she is unable to walk unassisted.

The laboratory findings were negative till the ninth day. From then on the blood showed a moderate leukocytosis and eosinophilia. The latter reached its maximum on the fortieth day. On the ninth day the urine analysis showed slight indication of Bright's disease, which became more pronounced within a week and remained as such throughout the acute stage of the disease, as seen in table No. 4. The blood findings are shown in table No. 3.

Case No. 3. Manley S., age 7, history negative except the usual diseases of childhood and an attack of malaria in November, 1923; but had been well since. On the night of February 8th, he had a slight gastrointestinal disturbance with nausea, vomiting and a mild diarrhea, which lasted forty-eight hours. Six days later he had a noticeable edema of the face and extremities, with tenderness of muscles. At the same time he had a slight rise of temperature, 99 in the mornings and 100.5 in the afternoons, which gradually rose to 100 in the mornings and 102 in the afternoons. Respiration was normal till the ninth day, but during the next ten days it went up to 23 to 26, after which it dropped again to normal. The temperature began to decline at the end of the second week, and became practically normal by the end of the fourth. He was not very uncomfortable at any time, although his muscles were swollen and tender.

His laboratory findings were similar to those in cases 1 and 2 only he had a higher eosinophilic count, which remained so for a longer period. His laboratory reports are listed under tables No. 5 and 6.

From a review of above histories, it is clear that the symptomatology was typical of trichinosis the 12th and 14th of February; but due to the fact that these cases were sporadic, and that we had had no previous experience with it, we did not suspect it until the 16th.

By referring to tables 1, 3 and 5 it will be observed that our blood findings showed an increased total white count in all three cases with a relative increase of eosinophiles from 9 to 10 per cent in each. At this time we considered the various causes of eosinophilia, and could easily eliminate clinically any other disease. When these considerations had suggested trichinosis, it was not difficult to see that our symptoms were positive, and could, at least, make a tentative diagnosis.

At this instance, we went further back into the dietetic history and found that they had received some pork sausage from a rural home January 25th, which lasted about three days. By further inquiry it was found that it had been eaten rare and semi-rare, even some of it had been eaten without any cooking at all by spreading it on sandwiches.

It was interesting to learn that the husband, and father of these children did not like his meat rare, and as he expressed it, had his sausages "turned over," hence did not have any ill effects from its use. From an interview with the family who prepared this sausage, it was learned that rats had been seen eating with their hogs while they were being fattened. We asked for a specimen of the sausage, but it had all been consumed. However, they furnished us with a piece of ham, in which we found many encysted trichinae. Thus the source of infection was established.

As previously mentioned, after the death of case No. 1, we secured a piece of the deltoid muscle including part of its tendinous insertion. On examination the tissue showed evidence of acute inflammatory reaction and presence of unencysted trichinal larvae. After teasing out very small pieces of the fibers, we were able to find them free of the tissues, and note that they were very active, displaying whip like movements with both extremities. They gave a clubbed appearance, with the tail blunt, and head pointed. Their rudimentary intestinal tract was easily seen. At room temperature they retained their motility for two hours when evaporation of the water, in which they were mounted, was prevented.

The incubation period varied in these cases from nine to fourteen days from the first day of ingestion of the sausage, till the first symptoms occurred. There were no subconjunctival or subcleral hemorrhages in either case; but headaches, sweating and insomnia were common to all of them. None of our cases showed any skin eruption or ecchymosis.

Our experience as regards the kidney is different to what most others have found. By reference to tables 2, 4 and 6 it will be seen that there was an accompanying Bright's commencing during the second period and lasting through the remainder of the febrile course. It is further observed that it was proportional to the severity of the infection. The laboratory findings became negative during the early part of convalescence in cases 2 and 3. Also traces of sugar were found in their urine, to which we see no reference in literature.

Recently attention has been called to a condition of hypotension in trichinosis. We did not verify this in any of our cases on account of the fact that at that time we had seen no references to it.

SUMMARY

1. Gastrointestinal disturbances, general edema, muscular stiffness and soreness, and a remittent fever were the clinical characteristics of our cases.
2. This, with an eosinophilic leukocytosis furnished sufficient ground for the diagnosis of trichinosis.
3. Infection in above cases occurred from eating rare and uncooked pork sausage, consequently, in imperfectly cooked pork there is a constant danger of trichinosis.
4. Confirmation of this diagnosis was made by finding unencysted trichinal larvae from the muscle tissue of case No. 1.
5. The source of the infection was established by finding encysted larvae in the pork ham from one of the hogs used in preparing the sausage.

In conclusion, I would like to add that due credit is given Dr. J. F. Gill, the family physician, for his invaluable service in both the diagnosis and treatment of these cases.

DISCUSSION

DR. W. T. LOWE, Pine Bluff: I had some discussion with Dr. Gill soon after he had made the diagnosis, and he told me the history of the infection was that these people out in the rural district had some hogs running around the place in a pasture in which was a very large barn and in this barn were a great many rats that had been there for a long time, the hogs had been running in this place for several months, and it is just to presume that the hogs had eaten these dead rats, or live rats, as it might have been, and that was the history of the infection.

I saw three of these cases soon after Dr. Gill had decided they had trichinosis, saw them after they went to the hospital, and so far as I was able to determine or that any of us could determine, nothing that was ever done for them had any direct effect on the course of the disease. The

woman died, as Dr. Pittman told you, seemingly from a paralysis of the muscles of the throat, because she just seemingly, at the last, died from paralysis of respiration.

Now, another thing that Dr. Pittman didn't mention. One of these patients, who had a case of trichinosis and got well, about two weeks ago gave birth to a child. It was a rather normal delivery. The labor pains were rather feeble, but she gave birth to a normal healthy child, and at the suggestion of Dr. Pittman, I had the placenta preserved and turned it over to him for examination, and so far as I am aware, he didn't find any evidence of Trichinosis in that placenta.

DR. PITTMAN: No.

DR. LOWE: That woman seems to have recovered. You didn't make a blood smear from the baby.

DR. PITTMAN: No.

DR. LOWE: There is nothing to indicate that the child might have had trichinosis.

DR. M. E. McCASKILL, Little Rock: I want to report that I have had 100 per cent recoveries in trichinosis. I just had one case! Some ten years ago I saw one case of trichinosis. The thing that impressed me about this case was the fact that the symptoms to me so much resembled typhoid fever, with the digestive disturbances, the type of temperature, etc. I did nothing for this case except to keep him in bed and he got well. I didn't cure him.

DR. H. THIBAUT, Scotts: There is probably a great deal more of this trouble than we diagnose. The doctor's paper was so thorough in covering the description of the disease that it seems to me that more physicians who live in communities where the inhabitants are careless about their food would suspect it.

A routine blood examination will almost invariably suggest some form of intestinal parasites when we find the eosinophiles above three or four per cent. In 1911 Dr. Von Ezdorf of the Public Health Service, made a malaria survey in Pulaski County and it happened that I got specimens for him from all the members of a certain family. A few months after the specimens were examined and found to be normal as to the relative blood count, one of the children was taken with a disease which was diagnosed when first seen as cerebro-spinal meningitis. In fact, the patient was so sick that we made a spinal puncture and, fortunately, found one of the larvae in the spinal fluid. This patient's eosinophiles rose rapidly to 15 per cent, one count as high as 18 per cent, and several members of the family had this trouble. All of them recovered. I don't remember that we gave them anything. I don't think it would have done any good. But two of them developed a violent myositis before incysting of the larvae. The cramps in the calf muscles were so great at times that one of the boys could only walk on his tip-toes. After a few days, though, this subsided, and since then the larvae have incysted in the muscles, and as far as I can tell none of those children are in bad condition.

Now, there is another condition which was suspected of being trichinosis, which turned out to be intense infestation with another parasite, oxyuris vermicularis. The peculiar thing is that it will incite an increased eosinophile count. But whenever they do produce intestinal disturbances, and they sometimes do in young children, with quick muco-watery stools and the elimination of nearly all of the impregnated female parasites. But there is one distinction that, while this acute

phase of oxyuris vermicularis infestation in children resembles clinically very much the acute stage of trichinosis, the eosinophiles in the blood invariably fall after one of these intestinal attacks with the oxyuris and it invariably rises after an acute intestinal attack from trichinosis, which is an easy differentiation in these cases.

I think that the doctor is to be congratulated, and I think the medical society is to be congratulated on the fact that its attention has been called to this condition, and I am convinced in the rural districts, especially in the bottoms where negroes are prone to eat raw ham, raw lean meat, and raw cured bacon, that we have a good deal more of it than is ever suspected by the profession or by the inhabitants of the country.

DR. C. W. GARRISON, Little Rock: I regard this paper as a valuable contribution to this Society, because I believe it will focus attention on the parasitic diseases. I am convinced that we have a great deal more sickness from this class of diseases than we have previously suspected and probably a good many more deaths. Not infrequently, we receive communications from doctors far removed from laboratory facilities, doing a large general practice in the country, requesting advice in regard to a case of illness and describing a train of symptoms. Sometimes, we are able to detail a laboratory man to the field; sometimes we are able to send containers and have the specimens submitted to the laboratory, and in that way be of assistance in clearing up an obscure diagnosis. In some instances it has proved to be amebiasis, bacillary dysentery, etc.

Last year I heard Dr. Francis of the U. S. Public Health Service deliver an address on "Tularemia." He is a man who made extensive investigations throughout the country in regard to this disease. He declared that Tularemia is prevalent almost throughout the country, particularly in the West, South and Southeast. Incidentally, Dr. Francis and all his assistants were affected with Tularemia in making their laboratory investigations on rabbits. The disease is transmitted by pricking the skin or having an open lesion when handling rabbits and squirrels, and butchers, or market men, have been found to be particularly exposed.

After having heard Dr. Francis' address, I recalled five or six communications which had come into the office from doctors over the State, describing cases which closely simulated the case reports by Dr. Francis, and in my judgment, were probably cases of tularemia. Last year a physician of Benton County reported a death from tularemia.

The occurrence of these cases as reported here today might be regarded as a reflection upon the health service of the State and country because if there was an adequate health service with protective laws requiring inspection of food supplies and food handlers, trichinosis would soon disappear. This is evidenced by the fact that in the older countries where there is a rigid food inspection no trichinosis occurs, and the only meat found infected with trichina spiralis is in imported American meat.

Milk is our greatest food and is the best substitute for mother's milk we have, provided it is pure; but it is the most dangerous food unless properly produced, handled and marketed.

There is no question but what this country is wealthy and financially able to set up and maintain a health organization necessary to protect the food supplies of the country.

I would urge the general practitioner to more frequently call to his aid the laboratory, and ask

that all practitioners help in molding public opinion to the necessity of health protection and aiding in securing the necessary registration.

DR. PITTMAN in response: During the past ten or twelve years I have been paying attention to eosinophilia, and have been able to make many diagnoses of intestinal parasites in cases of anemia, by noting an increase of the eosinophiles, and studying the stools for ova. This has been particularly true in cases of tape worm and hookworm. I recall several cases clinically diagnosed as pernicious anemia with 5-10 per cent eosinophiles, which proved to be due to intestinal parasites.

After we had made our diagnosis and found the pork infected which these patients had eaten, I tried to secure some rats from the farm-home where these hogs had been raised. In this we were unsuccessful and could not definitely establish the fact that in this particular instance the rat was the original carrier.

I referred to the curing of meats in my paper. This, if properly done, is an effective means of destroying the trichinae. The U. S. Department of Agriculture has found, for example, that 4 pounds of salt per 100 pounds of pork hams kept in the cooler 40 days at a temperature of 37 F., and then in the drying room or smoker at a temperature of 100 F. will sterilize the encysted trichinae. It has been found that the body of the larvae does not stand dehydration very well, and this is the principle applied in curing. Also it has been found that salt has a direct toxic action on the parasite.

It is a fact of common knowledge that 90 per cent of the rural people use home cured meats which have been imperfectly and improperly cured. Such meats have been found to have the trichinae devitalized in the outer portions; but in the deeper portions they are unaffected and will remain infectious almost indefinitely. Not only is this true of home cured meats, it is also true of any meats not cured according to the government established methods.

In conclusion I would like to impress the fact that trichinosis is a filth disease, and its prevention is more simple than that of typhoid fever, which is also considered a filth disease.

HYDROPHOBIA, OR RABIES*

G. A. WARREN, M. D., Black Rock

There are two distinct types of this disease, the rabid or virulent form, and the paralytic or the dumb form. While the animal affected by the former is to be feared and dreaded; the dog affected by the latter is equally dangerous, because of his apathy, his holding his mouth open and slobbering as if he were choked.

There have been many serious accidents in the latter form, in attempting to doctor the supposedly sick dog, or relieve the choked one.

The term hydrophobia is applicable to the disease in man; while rabies is more applicable to the disease in the lower animal; es-

pecially in all species of the canine type. For, the lower animals, and especially the dog, has no fear of water nor of any living thing.

The rabid dog, until he reaches the paralytic state, drinks freely of water, and in great quantities, frequently swimming streams in his wanderings.

A common fallacy among the laity is, that a rabid dog has fits, which is rarely true. He sometimes has muscular spasms or tremors, which became more frequent as the disease progresses; and the fact of a dog having fits is almost proof that he is not rabid.

This disease is communicated by inoculation with a virus from the diseased animal. Just what this virus is, we do not know. It may be a micro-organism of the bacilli type, or it may be of the plasmodia type. The weight of opinion is, that it belongs to the latter, because a fine filter paper will take the infection out of a solution.

This virus is found in the glands and nerves, especially the central nervous system of the diseased animal. The blood and lymphatics seem to be free from it. And the flesh is rarely capable of producing the disease. Many carcasses of animals that died of the disease have been devoured by vultures and other animals without infecting them. But this is largely because there are no breaks in the mucous membrane of the mouth or throat of the animals that eat such carcasses. And again, the gastric juice of animals destroys the infection, when it has lain in the stomach forty or fifty minutes. This has been repeatedly proven, in the dog, by feeding him the flesh and even the brain from an animal that has died of rabies.

After this material has stayed in the stomach of a dog for fifty minutes, it has become entirely harmless.

An experiment of this kind cannot be made on the human being.

The most common method of infection is by the bite of a rabid dog or cat, as the saliva of these animals contains the infection in a virulent form, even days before the animal develops any signs or symptoms of the disease. Some authorities maintain that the saliva of the human being and all lower animals except the cat and dog is free from the infection. But this is not wholly true; for in some instances, the saliva of man and of other animals has been capable of producing the disease in rabbits.

*Read at the 51st Annual Meeting of the Arkansas Medical Society, Hot Springs, May 18-20, 1926.

Yet there are many more failures than successes. I knew a rabid hog to be confined in a small pen, with several other hogs, all of which he bit many times; and none of them developed rabies. He was known to have been bitten by a rabid dog five or six weeks before the disease developed.

Another reason why the disease is not commonly communicated by any animal except the cat and dog species is, because few other animals attack or fight their enemy wholly with the teeth. The hog fights this way, but there is no record, so far as I can learn of the disease being communicated by a rabid hog.

The milk of affected animals is very dangerous. And babies should never be allowed to nurse a mother after she has had an opportunity to get the disease; for the infection is in the milk, days before the disease is apparent. Calves, lambs and even babies have been known to become infected from the mother's milk; but this is a true inoculation through some break in the mucous membrane in the mouth or throat of the young.

The period of incubation is the most variable of infectious diseases, ranging from 10 days to one and one-quarter years; but it is rare that a case develops before 21 or after 90 days.

Yet we have positive proof that in rare instances the disease is more than one year in developing. These delayed cases are not any milder than those that develop within three to six weeks. All are fatal—so far as medical records show, there has never been a recovery of an animal after the disease developed. Death is the inevitable end, in from two to eight days, usually about five days.

Therefore, we have no treatment for the disease itself. Yet we should look after the comfort of the patient, by seeing that he is in a quiet room, and if any light is admitted into the room, it should come from the north; for the playing of the sun rays or any movement or noise is objectionable to the patient. Even the wind blowing on him may cause muscular or nervous spasms that are very unpleasant and even painful.

The dread of water, or hydrophobia, is almost universal in the human being; and after a few days, the sight or even the sound of water causes muscular spasms of the fauces and throat; and when the patient attempts to drink, the liquid is thrown back through the mouth and nose.

I shall relate an experience I had with a patient more than a year ago. February 8, 1925, a rabid bitch came down the railroad track to the edge of town, and was there diverted from the main line by a switch or "Y," also by a public road which crossed the track at this point. This road leads to the mouth of Spring River, where were gathered several men and boys about a gravel plant. The bitch acted strangely, and the ferryman, who was a man 72 years old, noticed her as he was going from the river to the house and scolded her. She immediately snapped his left hand. He kicked her loose, and she started at some boys who were near, two of whom tried to escape her by jumping into a road wagon that stood near. She bit the hand of one as he jumped in the wagon, then followed them into the wagon, biting the hand of the other as he left the wagon. She also left the wagon and came again to the old man, who had gotten near the house and thought to ward her off by motioning at her. Again, she bit his hand, this time producing a very deep ragged tear in the fleshy part of the right thumb.

He immediately shot her, and the head was sent to the State laboratory to make the test for rabies; but it proved negative.

From the history of the bitch, I was sure that she was rabid, and ordered a Pasteur treatment, which I began February 10th, two days after the men were bitten. I gave the twenty-five injections to each of the three, three the first day, two the second day, two the third day, and one each succeeding day till all were given, completing the treatment March 7th.

March 16th, or nine days after the treatment closed, the old man complained of general malaise. The next day, I was called to see him, and he had a well-developed case of hydrophobia. He lived six days, dying March 22nd.

The Pasteur treatment seemed to modify the severity of the disease, for he could drink within ten or twelve hours of his death; though with great difficulty, taking a swallow, then waiting a little time, and taking another.

A drop of water on him or even on the floor would cause him to jump and have a muscular spasm, which he said was very painful to him. He was quiet save when a noise or movement disturbed him. The slightest breeze on him caused discomfort. He was rational to within a few hours of his death.

The right hand, which was severely bitten had apparently healed; yet the scar became red, swollen and tender; which is always true, even though the disease develops one year after the infliction of the scar. The right hand became paralyzed March 18th. The right arm was paralyzed the next day. The left hand and arm the next day. The lower limbs were not wholly paralyzed until ten or twelve hours before his death; and he could walk by the aid of a chair or stick; and could still drink when some one held the water to his mouth. He never slept, from the time the disease developed till his death, in spite of my efforts to make him do so.

This case developed before the immunity was fully established by the Pasteur treatment; as it takes 14 to 20 days after the last treatment is given, for the immunity to be complete; and he was dead four days before this time had elapsed.

The two young men had no trouble after the completion of the treatment.

While this disease is always fatal, it is also the most universal disease, as all warm-blooded animals are subject to it, and even the birds.

There is said to be but one case to develop in every three persons bitten. This is accounted for by the fact that most bites are through the clothing and the virus is brushed from the teeth before they enter the flesh.

It is also true that a thick-haired or woolly dog rarely develops the disease, when bitten through the hairy coat.

Many times, the wound is only a slight abrasion or scratch, and is easily cleaned so that the disease is not produced.

A deep laceration on any part of the body is dangerous, especially on the face, neck or hands, and almost always is followed by the disease, if the wound is not cauterized or the immunizing treatment given. The best cautery is pure nitric acid.

Just a word about the distribution of rabies. Every State in the Union is now infected by it, and nearly all countries in the world. The only exception, so far as I can learn, is Australia. That country enforces strict quarantine of all dogs that are brought there.

Before the World War, Great Britain was free from the disease. But dogs were brought into that country by the armies of other nations, and by its own armies, when they returned from the continent, because the quar-

antine could not be enforced during the war time.

The disease is found in every clime, from Greenland to the extreme southland, and during all seasons. No temperature seems to have any special influence on it.

The dog is the host of this disease, and all other animals are infected by the dog. If our country could and would quarantine the dogs for six months, and get rid of the wild species, wolves, coyotes, etc., we could free our country of rabies.

We may prevent its spread by immunizing the dog with a single vaccination, as has been practiced by the larger cities of Japan. This immunity is said to be good for one year.

There are few if any other infectious diseases, the prevention or extermination of which rests on a single measure, as does rabies. The public cannot say, with reference to this disease, "Let the medical men or scientists show us the cause of the disease and how it can be prevented, and we'll do the rest."

Unfortunately, some doctors of reputation and many of the laity say there is no such disease. But when a fact can be demonstrated, it is not open to argument.

A few words as to the different modifications of the Pasteur immunization. The regular Pasteur treatment consists of 25 hypodermics given in 21 days.

The Semple treatment consists of fourteen injections in fourteen days, and this material can be kept by the physician, for a limited time at least; and seems to give as good results as does the Pasteur treatment.

The Cumming modification consists in fourteen injections in mild cases, and twenty-one injections in all severe cases. Of 5,000 or more treated by this method, no failures have been reported.

The Hogyes treatment for the immunization of the lower animals consists of six injections as follows: Two the first day, two the second day, one the third day and one the sixth day.

DISCUSSION

DR. W. L. HOLT, Little Rock: I am very much interested as a health officer in the prevention of rabies in dogs and indirectly in people through vaccination of dogs; that is, compulsory vaccination being required with the license. We were having quite an epidemic of rabies in dogs in the summer of 1924, shortly after I went on as health officer of Little Rock. I had read shortly before about the rabies vaccination of dogs in Japan, and I believe that it has been proven to be very efficient there in Japan. They have done

it on a big scale there. I have forgotten the figures now, but I think as many as 100,000.

DR. WARREN: Yes. Over 100,000.

Dr. HOLT: So I persuaded the city council to pass an ordinance that fall of 1924, requiring that in the future, in order to get a city license, all dogs must be vaccinated. Of course, this vaccination costs something, and we discussed whether we should make an additional charge for the vaccination, but the mayor held out for not making any charge, so that it wouldn't be so unpopular as it was likely to be anyway. Our license for dogs in Little Rock has been for some time \$3.00, irrespective of sex. In most places they charge more for the females. We charge the same for each sex, and we have kept the same fee of \$3.00, including the vaccination. The vaccine only costs us about 37½ cents a shot, and it only takes one shot. Of course, there wasn't any extra expense to the city for giving it. That was done chiefly by the city veterinarian. We offered free vaccinations for a month at the City Hall and, after that, in order to get a free vaccination you had to take your dog to the city pound at a certain time and the man, who was formerly called the "dog catcher" and who now is given the sonorous title of Rabies Prevention Officer, will do that for you.

I cannot assert that we have eliminated rabies among dogs in Little Rock, but I can say that we have reduced it to a great extent. We haven't had a human case, but, of course, we have had a few rabid dogs. We have had very few that gave a positive laboratory report. As Dr. Warren says, you must rather expect a negative report in any case of a dog that is killed at the beginning of the disease when he is rabid, rushing around and has bitten somebody. Occasionally you get a negative report even in a dog that is allowed to die of the disease and you send the brain to the laboratory. That is, in such a case the laboratory man disagrees with the veterinarian. Sometimes they have the typical symptoms and yet the laboratory man says there is no trace of the organism, which there ought to be when the dog dies of the disease. That is one of the unfortunate things. But the only safe attitude I think for either the health officer or the physician to take in doubtful cases is to advise the treatment because it is the most horrible of all diseases. It is not merely that it is invariably fatal, but it is so terrible.

Now, I wish to advocate an ordinance requiring all dogs to take this rabies vaccine. I would like to say that we had no where near the trouble we expected with the public in enforcing this. You can't, of course, get a 100 per cent enforcement. But it certainly is more effective than the old-fashioned method of prevention of rabies by muzzling, because a great many dogs are not muzzled, and a lot of those that are muzzled can bite in spite of their muzzles.

I want to recommend this method of controlling rabies very strenuously, but, of course, it should be made compulsory. It has been made compulsory in quite a few cities now; in the East as well as in this part of the country.

The City Council of Hot Springs passed a compulsory rabies vaccination ordinance very similar to the Little Rock ordinance. Only two of the

fourteen aldermen present voted against it, although dog owners will have to pay a private veterinarian, as there is no city veterinarian available.

DR. E. F. HODGES, Branch: Why not have the committee on legislation have it made a State law, a compulsory law; to either kill that dog or vaccinate. (Applause).

DR. KIRBY: I am glad the doctor made that remark and if he had as little confidence in the Legislature as I have, he wouldn't put anything up to them. (Laughter).

CHAIRMAN WOOD: You can sometimes bring pressure to bear on your legislator that will make him do what you want.

DR. WARREN, in response: I want to emphasize this: That you must make your diagnosis yourself and begin treatment immediately, because procrastination will kill. It is sometimes too late when the bite is inflicted. But it surely is too late to wait until the dog dies and then send the head to the laboratory and have it examined and confirmed. The dog develops various symptoms even before he shows the disease and yet five days after the disease he may be free from any positive laboratory findings in the brain. So that you can't wait. You must begin now if you want to get results, and then you can't always get them. That I want to emphasize because, if it is going to come in the first three or four weeks, your vaccine would be no good or practically no good.

There was a case reported at El Dorado recently that died in the hospital of rabies, and two in Thayer, just above our State line, died last summer, of rabies, and they are occurring all the time. A woman died of rabies and during the time she had it she gave birth to a child, and killed the child in her ravings. So it is an awful disease, as Dr. Holt told you, and we can and we ought by all means to get rid of it.

Dr. F. P. Gengenbach, Denver, in discussing an article on "Acute Appendicitis in Childhood" by B. B. Blotz, published in Colorado Medicine for December says in Part: "I want to particularly make a plea for a sufficiently prolonged convalescence after major operations in children, including appendectomy. I have been frequently impressed by the presence of functional cardiac murmurs occurring after operations, even tonsillectomies, and I am not in sympathy with the surgeon who is always trying to see in how short a time he can get the child out of bed and back to school. Surely all of us who read the sport page of the newspaper could not help but be impressed by the experience of our famous young female tennis champion, which showed very definitely that one should avoid violent or prolonged exertion for weeks and sometimes even many months, after major operations."

THE JOURNAL
OF THE
ARKANSAS MEDICAL SOCIETY

Owncd by the Arkansas Medical Society and Published
under the direction of the Council.

WILLIAM R. BATHURST, Editor
810-812 Boyle Building, Little Rock, Arkansas.

Published Monthly. Subscription \$3.00 per year; single
copies 25 cents.

Entered as scnd-class matter, June 21, 1906, at the
postoffice at Little Rock, Arkansas, under the Act of
Congress of March 3, 1879.

Acceptance for mailing at special rate of postage pro-
vided for in Section 1103, Act of October 3, 1917, autho-
rized August 1, 1918.

The advertising policy of this Journal is governed by
the rules of the Council on Pharmacy and Chemistry of
the American Medical Association.

All communications of this Journal must be made to it
exclusively. Communications and items of general inter-
est to the profession are invited from all over the State.
Notice of deaths, removals from the state, changes of
location, etc., are requested.

OFFICERS OF THE ARKANSAS MEDICAL SOCIETY

J. M. LEMONS, President.....	Pine Bluff
HENRY THIBAUT, President-Elect.....	Scott
G. E. TARKINGTON, First Vice-President.....	Hot Springs
T. F. KITTRELL, Second Vice-President.....	Texarkana
J. H. FOWLER, Third Vice-President.....	Harrison
R. J. CALCOTE, Treasurer.....	Little Rock
WM. R. BATHURST, Secretary.....	Little Rock

COUNCILORS

First District—THAD COTHERN.....	Jonesboro
Second District—J. L. JONES.....	Searcy
Third District—M. C. JOHN.....	Stuttgart
Fourth District—W. T. LOWE.....	Pine Bluff
Fifth District—W. P. COOKSEY.....	Magnolia
Sixth District—B. C. MIDDLETON.....	Texarkana
Seventh District—DEWELL GANN, SR.....	Benton
Eighth District—ANDERSON WATKINS.....	Little Rock
Ninth District—SAM G. DANIEL.....	Marshall
Tenth District—THOMAS DOUGLASS.....	Ozark

COMMITTEES

SCIENTIFIC PROGRAM—R. J. Calcote, Little Rock, chairman; A. S. Buchanan, Prescott; R. H. T. Mann, Tex- arkana.
SCIENTIFIC EXHIBIT—C. E. Oates, Little Rock, Chair- man; Homer Scott, Little Rock; D. E. White, El Dorado.
MEDICAL LEGISLATION—Earle H. Hunt, Clarksville, chairman; J. W. Walker, Fayetteville; Thad Cothern, Jones- boro.
STUDENT LOAN FUND—E. F. Ellis, Fayetteville, chair- man; J. H. Lenow, Little Rock; Wm. R. Bathurst, Little Rock; G. A. Warren, Black Rock.
NECROLOGY—Cowley S. Pettus, Little Rock, Chairman; F. B. Kirby, Harrison; E. E. Barlow, Dermott.
HEALTH AND PUBLIC INSTRUCTION—C. W. Garrison, Little Rock, chairman; F. Michael Smith, Pine Bluff; M. E. McCaskill, Little Rock; President and Secretary of State Society.
CANCER CONTROL—Dewell Gann, Jr., Little Rock, chairman; John S. Jenkins, Pine Bluff; J. C. Hughes, Hoxie.
INFANT WELFARE—A. C. Kirby, Little Rock, chairman; N. D. McCormack, Ft. Smith; H. W. Browning, Little Rock.
HOSPITALS—J. D. Southard, Fort Smith, chairman; D. A. Rhinehart, Little Rock; J. T. Palmer, Pine Bluff.

Editorial

Yuletide, 1926

As we write, the spirit of Christmas is everywhere in evidence. Mothers receive mysterious packages and secrete them from curious eyes of the youngsters, duly to be brought down the chimney by Santa Claus during the darkness of Christmas Eve. Shoppers crowd the stores and streets selecting appropriate gifts; what to buy for Grandpa, for Grandma, for Daddy and Mother, for the children, for Aunt Jessie and Uncle Frank. These are the problems of the hour, and in solving them a flood of human kindness and love is loosened which, perhaps is less in evidence at other seasons.

Once, away back in the days of Babylon and later, the day was celebrated by sun worshippers as making the new birth of the sun, and the holiday period was the occasion of a week of drunkenness and debauchery. But, as a Christian festival, adopted as the anniversary of the birth of Christ, it has become a time of sane rejoicing and of gift giving and the dispensing of joy to all.

In our gift giving let us remember that "it is more blessed to give than to receive." Let not selfish considerations of possible reciprocity in some form or another rule us. Let us not give to him that hath, but to him who needs. That is the true spirit of the season of good will to mankind.

*A HAPPY CHRISTMAS
AND PROSPEROUS NEW
YEAR IS THE JOURNAL'S
SINCERE WISH TO ITS
READERS.*

ANTI-EVOLUTION LEGISLATION

It is sincerely to be hoped that the proposed bill to prohibit the teaching of the theory of evolution in any school or college, supported by public taxation and under State control, will be defeated. We do not believe that the people of Arkansas desire to undergo the sort of publicity that Tennessee underwent at the Scopes trial.

It is a singular feature of this latter day anti-evolution agitation that it should become rife more than half a century after Darwin first promulgated the theory in "Origin of Species" and the "Descent of Man." For all the intervening years the church at large, protestant and Catholic alike, merely ignored the theory. Many ministers ridiculed it from the pulpit, a prominent Catholic Priest was disciplined for accepting the theory and writing in defense of it, but not until the last few years did any one dream of invoking the law to prevent its being taught in educational institutions. Of late years, there seems to have sprung up a desire on the part of the fundamentalists to overthrow the spirit of the constitution, failing in that they did succeed in having inscribed on some of the silver coinage the words, "In God We Trust." Certainly in this day of accumulation of vast riches under evasions of the law, or of legislation enacted in the interest of the barons of trade and banking, by unjust tariff laws and anti-trust laws, which have proven ineffective to check rapacity and agreed, to say nothing of the grafting in high places, it does seem that of all methods of recognizing Deity, the dollar was the most unfit.

But although nominally this is a country of which one of the cardinal principles of government is the separation of Church and State and an express clause forbidding the passage of laws in favor of any religion, the propagandists of God in the Constitution are partly effecting their purpose by Sunday laws forbidding even innocent amusements on the Christian Sabbath, in some States by compulsory reading of the bible in secular schools and by legal efforts to place a ban on the teaching of the theory of the descent of man, on the express grounds that it contradicts the scriptural account of creation. It must not be forgotten that such prohibitory methods never have been successful. Making Galileo recant did not keep this globe a flat plain with four corners, nor of being round and revolving upon its axis and around the sun. On the con-

trary, although the church could—and did—imprison and torture the scientific "heretics" of the day, the church was forced to accept their demonstrated facts at last. Never in history has it been possible to make man more moral or religious by law. Nor will anti-evolution statutes stay the march of science.

It must be borne in mind too, that such an anti-evolution law if adopted, would apply to our medical school, it being a part of the University of Arkansas, and the known facts of biology, zoology, and physiology be placed under the ban of the law.

Abstracts

SPOROTRICHOSIS, OCCUPATIONAL DERMATOSIS

Eighteen cases of sporotrichosis were analyzed by Harry R. Foerster, Milwaukee (Journal A. M. A., Nov. 13, 1926). Fourteen of these patients were employees of a tree nursery, and at least ten undoubtedly acquired the infection by inoculation with the thorns of the barberry shrub. Thorns, bark and leaves of the various shrubs, particularly the barberry, cultivated by the nursery concerned in this report, were planted on Sabouraud's medium. The experiments were repeated at different times of the year, but all efforts to isolate the sporothrix by this procedure were fruitless. In the cases reported by Foerster, barberry thorns were removed in two from the primary lesions of sporotrichosis after supuration had occurred, in six, deeply embedded barberry thorns were removed from a few days to two weeks preceding the development of sporotrichotic chancre at those sites. In two others, the patients had repeatedly pricked themselves with the thorns preceding development of the disease and were handling barberry shrubs daily at the time of appearance of the lesions. One man bound shrubs for shipment and was in the habit of tearing the twine with the tip of his right index finger. He developed a sporotrichotic chancre at that site. One of the other three patients injured himself with a shovel at the site of a subsequent lesion, while two could not recall injuries. The caretaker of the nursery was the only man in the organization who handled the horses, and he never developed sporotrichosis. Potassium iodide in rapidly increasing dosage of from 30 to 90 grains (2 to 3 Gm.) daily,

it is said, usually results in prompt involution of the lesions. It should be continued for a month after apparent recovery, to avoid recurrences. Locally, compound solution of iodine may be applied to ulcerations, and roentgen-ray irradiation employed to promote resolution of infiltrates. When potassium iodide is not tolerated by mouth, compound solution of iodine may be used intravenously.

MALARIA TREATMENT OF CENTRAL NERVOUS SYSTEM SYPHILIS

J. R. Driver, John A. Gammel and L. J. Karnosh, Cleveland (*Journal A. M. A.*, Nov. 27, 1926), review 2,336 cases of general paralysis treated with malaria recorded in the literature to April 1, 1926. Full remissions were obtained in 641, or 27.5 per cent, and incomplete remissions in 616, or 26.5 per cent; there were 1,079, or 46 per cent, unimproved. A total of 54 per cent improved surpasses by far the results obtainable by any former method of treatment. The authors also review their results from treating seventy-nine patients. Of these, there were six failures to reproduce the disease, and in eight instances the infection aborted spontaneously, or complications arose which necessitated arrest of the treatment before the patients had experienced five paroxysms, leaving a total of sixty-five cases on which to base results. The series includes thirty-one unselected cases of general paralysis, two of juvenile paresis, thirteen of taboparalysis, twelve of tabes dorsalis and seven of cerebrospinal syphilis. In the group of patients with general paralysis, eight obtained complete remissions, the improvement being so pronounced that there was absence of the speech defect, no evidence of delusional upset, and no amnesia or disorientation; the general conduct of the patients was normal and all have been discharged, under supervision, to return to work. In eight moderately improved cases, incomplete remissions were evidenced by freedom from irritability and amnesia; speech and tremor defects were still present to some degree in all, and the general conduct was fairly good. In four cases slightly improved there was mild recovery from the most disagreeable features of the disease, and the patients became more easily manageable. They retained their amnesia, were confused mentally, and the speech and tremor defects were still present. In seven cases unimproved

there was no demonstrable change in any form. These observations agree with those of Nonne in that the neurologic phases such as fixed and irregular pupils, faciolingual tremor and pathologic reflexes were very resistant to this form of treatment. Improvement is most likely in the mental phases, and to a lesser degree in spinal fluid changes, although improvement here in the colloidal gold curve was fairly constant in all patients benefited by malaria. There were four deaths in this group. All were far advanced and markedly deteriorated before treatment was started. In no instance could death be ascribed to malaria alone; still, there is no question but that it did predispose patients to serious secondary infections which could not be combated by those already in a poor physical condition. In thirteen cases of taboparalysis 3 obtained pronounced improvement, as shown by complete freedom from mental symptoms and tabetic pains, while the neurologic manifestations were practically unchanged. Three were moderately improved, three were slightly improved, while four were unchanged. Of two patients with juvenile paresis, one was slightly improved mentally, the Wassermann reaction on the blood and spinal fluid six months after treatment was unchanged, as was also the gold chloride curve, while the cell count which before treatment was 105 returned to normal and the globulin test became negative; the other case remained unchanged. Of twelve patients with tabes dorsalis, three have been relieved completely from persistent gastric crises and lightning pains for a period of from four to six months to date. In four cases, pains have been markedly decreased in intensity; in two instances slight benefit was obtained, while in two no change could be noted. So far no material improvement in the serologic reactions of the blood or spinal fluid in tabetic patients have been noted. Objective symptoms were uninfluenced, but physical improvement was noted in the majority. There were seven cases of cerebrospinal syphilis. Five showed no subjective symptoms, but in all, large amounts of intensive antisyphilitic treatment was given without influence on the serologic reactions of the spinal fluid. These results are confirmatory of the work of similar character published by other investigators. The authors believe that further use of the method is warranted in selected cases of central nervous system syphilis that no longer show improvement by the usual methods of modern antisyphilitic treatment.

Personal and News Items

COUNCIL ON PHYSICAL THERAPY*

Report of Committee on Present Status of Physical Therapy

Physical therapy is a term employed to define the treatment of disease by various non-medicinal means. It comprises the use of the physical, chemical and other properties of heat, light, water, electricity, massage and exercise. There are certain definite indications for the use of some one or a combination of several of these physical agencies in the treatment of disease, but to depend on these agencies solely, to use them in lieu of better proved methods, or to employ them without having first thoroughly studied the patient from the viewpoint of diagnosis, is harmful practice.

Some physical agencies may be used on the theory that "they will do no harm and may do some good." The psychologic element in their use impresses the patient, usually beneficially but occasionally to his detriment. The use of a certain method may become a habit with the patient, the physician or the technical assistant, so that the course of treatment is prolonged unduly. Again, manufacturers' agents—salesmen absolutely untrained in medical science—visit physicians, extolling the virtues of special physical apparatus, making unfounded claims as to curative values, and emphasizing the money-making powers of these methods of treatment.

Physical therapy came into its legitimate place in medicine during the World War. Today it is gradually taking its place with the usual medical and surgical procedures. But unless we guard against bad habits in its usage, against allowing it to replace careful diagnostic measures followed by well defined but less spectacular methods of treatment, and especially, unless we guard against its insidious tendency to make its master an easy living, physical therapy may lead into dishonest practice or quackery.

The physical measures that have been found to have certain therapeutic value both by long clinical experience and by laboratory research include:

1. *Heat, Natural and Artificial.*—Diathermy, hot dry packs, hot water bottle, electric pads, and the combination of heat with light and of heat with hydrotherapy.

2. *Hydrotherapy.*—Hot and cold packs, hot and cold douches, whirlpool baths, swimming pool.

3. *Light.*—Heliotherapy or sunlight therapy; artificial light, as that from a mercury arc quartz lamp, air or water cooled, a carbon arc or modified carbon arc lamp, or an incandescent lamp; gamma rays of radium; roentgen rays.

4. *Electricity.*—Galvanic, faradic, and sinusoidal currents, static electricity, ionization and combinations of these.

5. *Massage.*—Manual percussion; stroking sedative type, brisk kneading type; manipulative as stretching, pulling and corrective.

6. *Therapeutic Exercises.*—Muscle training exercises, passive and active: mechanotherapy, occupational therapy, games.

Physical therapy is at present in a transitional stage. Its use is extending, but it is still violently condemned in toto by some physicians. Experience indicates that a selected combination of physical measures offers the best results in certain pathologic conditions; in other conditions such measures serve as a beneficial adjunct to the usual medical and surgical treatment. Above all, continued treatment by physical measures seems to result in better functional results than when patients are left to their own devices in securing restoration of function.

Many physical measures, however, have served as the chief of the armamentarium of quacks and charlatans in the past. Moreover, with renewed interest in this subject, cultists have adopted physical measures and have made extravagant unscientific claims as to their value. The avidity with which some have seized on physical therapy solely as a means of financial gain has disgusted most conscientious practitioners of medicine.

The Council on Physical Therapy feels that the following considerations must receive the most careful attention of the medical profession:

1. Physics, physiology and biochemistry must be called on to dispel the empiricism of the past and to prove the true scientific value of various physical agencies.

2. Physical therapy must be recognized as a definite part of medicine, to be practiced and controlled by graduate physicians. It should

*Reprinted from The Journal of the American Medical Association, October 16, 1926, Vol. 87, pp. 1302 and 1303.

be used only as one of the triad of medicine, surgery and physical therapy. It should be prescribed only after careful physical and laboratory examinations of the patient have been made. It should never be prescribed except by a physician thoroughly trained in the use of physical agencies.

The treatment of disease, whether by drugs, surgery or physical agents, belongs solely in the realm of medicine. A physician would not refer a patient to a non-medically trained technician for treatment by either drugs or surgery. Yet many physicians may refer patients to technicians—masseurs, gymnasts or nurses who have received training in physical therapy, or even to members of various cults for physical therapeutic treatment.

Therefore physical therapy must be recognized as a component part of medicine, and patients requiring this type of treatment should be referred only to physicians trained in this specialty. In this way the use of these methods by charlatans will be largely eliminated.

3. Since physical therapy is a definite part of medicine, every medical school should give a thorough training in this subject. The paucity of post-graduate and undergraduate instruction in physical measures in our medical schools has placed the profession at a disadvantage. Many attempts have been made to remedy this situation. A subject as intricate as physical therapy requires more study than a salesman's assertion that the snapping of a switch or the pressure of a button will definitely assuage any pathologic change.

The making of physical therapists by courses of one or two weeks, often reeking with commercialism, must be condemned. The three to six weeks' courses, sponsored by reputable medical schools, are frankly make-shifts, but do serve to show that would-be physical therapist the breadth of the subject. At least they effect the realization that such a period suffices only for establishing the purely mechanical details of technique and the broader physiologic groundwork on which, aided by his medical knowledge and common sense, one may attempt to erect a physical therapeutic superstructure. The remedy is adequate instruction to undergraduates in the medical schools. Courses starting with biophysics should be given in the last three years. In the postgraduate schools, more intensive and prolonged courses should be offered. Medical societies should invite physicians specializing

in physical measures to give sane, scientific courses in physical therapy to their members. A fair proportion of the scientific programs of medical societies should be assigned for discussion of physical measures of treatment.

4. Persistent, prolonged effort must be made to eradicate the abuses of physical therapy. A physician who has installed a diathermy machine or an ultraviolet ray generator can do good in carefully selected cases with one of these methods. He is not, however, fully equipped to render physical therapy. As a rule it is the careful combination of several physical agencies that gives the best results. Again, physicians must guard against the overenthusiastic use of new instruments and the treating of patients for prolonged periods by nurses, technicians or office assistants.

The training of technicians should be encouraged, for trained technicians are invaluable to physicians specializing in this field. But technicians should be discouraged from establishing individual plants, even though the major part of the work is referred by physicians.

The "treatment habit" is a menace, prevalent in general practice and reaching its zenith in the physical therapeutic departments of civil hospitals. Undesirable and incurable patients may be easily referred to the physical therapy departments, where they remain long after attaining maximum improvement, to the great disadvantage of patients urgently needing such treatment to shorten their time of disability and to secure functional restoration. Under most industrial compensation laws the treatment habit tends to become firmly fixed.

The Council on Physical Therapy of the American Medical Association will endeavor to point out to the medical profession the advantages and the disadvantages of physical therapy so that its abuses may be reduced to a minimum, and its scientific possibilities may be appreciated.

U. S. PUBLIC HEALTH SERVICE ANNOUNCES SPECIAL COURSES FOR PHYSICIANS IN TREATMENT OF VENEREAL DISEASE

Surgeon General Hugh S. Cumming has announced that the U. S. Public Health Service, as a part of its co-operative work with State health departments in the control of venereal diseases, will give special courses of

training to physicians, clinicians, and health officers at its venereal disease clinic, Hot Springs, Arkansas.

This clinic, which is operated by the Public Health Service in a new building belonging to the Department of Interior, offers exceptional opportunities for the study of the venereal diseases, especially in clinical and laboratory diagnosis, treatment methods, and clinic management. Here, studies of the many practical and scientific problems connected with venereal disease control are carried on. Last year 3,570 indigent persons were examined at the clinic; 3,064 cases of syphilis and gonorrhea were diagnosed and given a total of 32,315 treatments.

Surgeon General Cumming states that the instruction courses which now are offered will consist of a series of lectures by the Director and the Consulting Specialists attached to the clinic, demonstrations in laboratory and treatment methods, and practical experience in the diagnosis and treatment of syphilis and gonorrhea in various stages through participation in the routine work of the clinic. New classes of not more than ten physicians will form on the first of each month and the course will continue for a minimum of thirty days. Engraved certificates will be presented by the Public Health Service to those who satisfactorily complete the thirty-day course.

Fees are not charged for this course of instruction. The individual physician, however, will necessarily provide his own travel expense to and from Hot Springs and his living expenses while there.

Interested physicians should write to the local State health officer or to the Surgeon General, U. S. Public Health Service, Washington, D. C., for information or application blanks. Applications should be indorsed by the State health department in which the applicant resides before being submitted to the U. S. Public Health Service.

OFFICERS OF THE WOMAN'S AUXILIARY OF THE ARKANSAS MEDICAL SOCIETY

President—Mrs. Dewell Gann, Sr., Benton.

President-Elect—Mrs. C. T. Drennen, Hot Springs.

Vice-President—Mrs. T. G. Porter, Hazen.

Secretary—Mrs. Dewell Gann, Jr., Little Rock.

Publicity Secretary—Mrs. Homer Scott, Little Rock.

Parliamentarian—Mrs. C. H. Nims, Hot Springs.

Treasurer—Mrs. W. Robert Richardson, Little Rock.

HYGEIA AS A HOLIDAY GIFT

Recently a letter was sent to a selected list of laymen announcing that the American Medical Association is now publishing HYGEIA, and describing the features of the magazine. One of the letters came into the hands of a banker in Asheville, North Carolina. So impressed was he with the value of HYGEIA to everyone, that the bank of its own accord, and at its own expense, took large display space in two Asheville newspapers to reproduce portions of the letter, publicly endorse HYGEIA and let citizens know that it could be obtained from the American Medical Association, 535 North Dearborn Street, Chicago.

This instance in itself might not have a great deal of significance, but it is typical of the way in which influential individuals, organizations and institutions have received and endorsed HYGEIA. Without any general advertising, and with conservative efforts to promote circulation, HYGEIA has become widely known among intelligent laymen and leaders in health work.

What does this mean to the medical profession? If anything, it signifies that the public is awakened and eager on matters of health and that it looks to the medical profession for information. Thousands of physicians feel this responsibility and help to meet it by keeping a copy of HYGEIA in their reception room.

Another excellent plan which finds favor with many physicians at the holiday season is to give gift subscriptions for HYGEIA to patients or other friends. It is something that can be given with propriety and with the feeling that it will contribute to the welfare and happiness of the recipient.

The special holiday rates are as follows:

One subscription.....	\$3.00
Two subscriptions or one subscription for two years.....	5.00
Three subscriptions or one subscription for three years.....	6.00
Each additional subscription.....	2.00

On request a beautiful gift card as shown on the enclosed circular will be sent just before Christmas.

NORTH AMERICAN PHYSICIANS ARE INVITED TO VISIT THE CLINICS OF EUROPE AGAIN IN 1927

In May, next year, a group of physicians with members of their families from the United States and Canada, under the direction of the Inter-State Post-Graduate Medical Association of North America, will sail from New York to visit the following leading medical centers of the Old World:

London, Edinburgh, Oslo, Stockholm, Upsala, Lund, Copenhagen, Hamburg, Leipzig, Munich, Strasbourg, Heidelberg, Frankfurt, and Paris.

This will be the third year that foreign assemblies have been conducted under the auspices of this organization. Those of 1925 and 1926 were exceedingly successful and of great benefit to the physicians who took advantage of them. No doubt, the 1927 assemblies will meet with equal success.

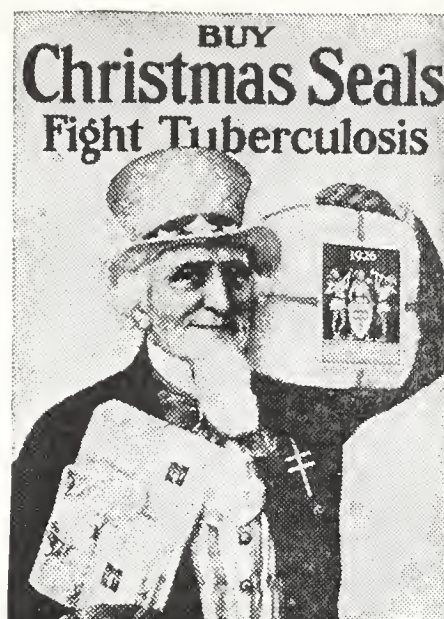
In including Norway, Sweden and Denmark in the itinerary, the Association is offering the profession an exceptional opportunity to visit and study in some of the finest clinics in the world.

The group of physicians will be limited to a number that can be comfortably accommodated in the clinics which will cover the entire field of medical science.

The price of the trip will be kept as low as possible and yet furnish first-class accommodations. It will be between \$1,000.00 and \$1,100.00. All physicians who are in good standing in their State or Provincial Society may register. Further information may be obtained from the Managing-Director, Dr. William B. Peek, Freeport, Illinois, or the Travel Department of the American Express Company, 65 Broadway, New York, N. Y., who have charge of the transportation.

The following physicians were recent visitors to Little Rock: J. J. Morrow, Cotter; J. H. Weaver, Hope; John F. Brewer, Kerr.

W. B. Lawrence, Batesville; E. F. Ellis, Fayetteville; W. H. Abington, Beebe; Thad Cothurn, Jonesboro; J. L. Jones, Searey; M. C. John, Stuttgart; Dewell Gann, Sr., Benton; W. P. Cooksey, Magnolia; Thos. Douglass, Ozark; B. C. Middleton, Texarkana; H. T. Smith, McGehee; J. L. Butler, Sheridan; G. E. Tarkington, Hot Springs; F. M. Smith, Pine Bluff; W. L. Holt, Hot Springs; C. A. Riee, Rogers; E. F. Brewer, Augusta; W. B. Bruce, Marvell; E. H. Stevenson, Fort Smith.



A SUBSTITUTE FOR PILLS

"Stop taking headache medicine, indigestion tablets, constipation pills, and tonics," said a famous doctor to a rundown patient. It matters not whether the patient be man or woman for the advice that follows will serve for either. "Walk more; take some physical exercise every day; be outdoors and report back to me in two months."

Everyone may not be fortunate enough to belong to a golf club and get in an afternoon or more of exercise weekly on the links. We may not all have access to a gymnasium, to a tennis court or swimming pool. Nearly every one has, however, his two good legs and enough money to buy a sensible pair of shoes and can walk at least a mile or two daily. Cool crisp fall days lure one out-of-doors and there is no tonic in the world that can keep one more fit than a good brisk walk. But it must be brisk to do any good.

If the "tired business man" can supplement this with a few setting-up exercises in the morning and at night before retiring, with a weekly visit to a gymnasium, there is no good reason why any such desk-worker should become flabby, or have that middle-aged feeling. It is all very well to modify the diet and eat more wisely with the approach of middle life; but a splendid diet regimen will be of no avail if the muscles are allowed to become stiff and the body is not kept well oiled with exercise.

Neck muscles must be strong to hold the head erect and high; abdominal muscles must keep the organs from slumping or bulging. Arm, leg and trunk muscles must be reliable

and enable one to work efficiently with vigor and enjoyment.

With this muscular development (not over-development unless you are to be a circus performer), will come better circulation of blood, better respiration and better functioning of skin, intestines and kidneys.

Prevention of sickness is our modern medicine. Nowadays we go to the doctor to keep from getting sick. One of our best medicines to prevent sickness is exercise.

The National Tuberculosis Association and its affiliated Arkansas and local associations advocate exercise as one help toward conquering tuberculosis. This disease does not attack a healthy well-functioning body. Their campaign, conducted for the past twenty years, is financed by the sale of Christmas seals every December.

ERRATA

On account of typographical errors, overlooked in checking, the following names were not included in our roster of members published in November number:

W. I. Poole, St. Francis.
J. C. Chenault, McGehee.
J. W. Francis, McGehee.
O. C. Melson, Little Rock.
Madeline Melson, Little Rock.
W. L. Sadler, Little Rock.

On Friday, December 3rd, at a banquet given in his honor, by the Central Presbyterian Church, Dr. H. D. Wood of Fayetteville, was presented with a gold watch, in recognition of the completion of fifty consecutive years of faithful service as elder of that church. When he joined the membership was twenty-five; it is now four hundred and fifty.

The following Arkansas physicians attended the recent meeting of the Southern Medical Association at Atlanta:

Louis R. Brown, D. C. Walt, M. Z. Bair, C. W. Garrison, H. Fay H. Jones, E. Meek, Morgan Smith, and Wm. R. Bathurst, Little Rock; W. P. Cooksey, Magnolia; R. C. Dorr, Batesville; L. D. Dunnean, Waldron; Albert H. Tribble, O. C. Wenger, W. F. Simpson and O. H. King, Hot Springs; A. M. Elton, Newport.

The Tri-States Medical Association of Mississippi, Arkansas and Tennessee will meet in Memphis, February 1-2-3, 1927. Secretary Cooper says, "For absolute quality the program to be presented has never had a superior

at any medical gathering in the South. That is a calm statement of fact, not boasting. Several have had more bulk, but few have ever approached it in worth. It means an intensive, varied post-graduate course you can't afford to miss."

"The regular medical profession does not need laws to protect its members from irregulars, but the public does need protection against incompetent and irresponsible individuals who are proposing to treat the sick. It is for the medical profession to sponsor increasingly more adequate means of supplying this need."

County Societies

CRAIGHEAD COUNTY

(Reported by THAD COTHERN, Secretary)

The regular meeting of the Craighead County Medical Society was held December 9th, at Hobohemia of the Hotel Noble. A "Dutch" lunch was served at 6:30, the "eats" of which were all that could be desired.

Dr. Cothern told of some of the plans outlined by the mid-winter session of the Council of the State Medical Society held December 8th. One thing of especial interest was probable legislation to cure the defects in Arkansas' Medical Practice Act to be asked for at the coming session of the General Assembly. Much interest and enthusiasm were aroused by this report and free discussion was quite general.

Officers elected for 1927: President, S. W. Moreland; First Vice-President, Ira Ellis; Second Vice-President, Robert B. Burns; Secretary, Thad Cothern; Treasurer, W. C. Overstreet; Censor, J. L. Baird.

The meeting was very much enjoyed and everyone voiced a desire for a larger and better work for our Society during the coming year. Each one pledged faithful attendance and expressed a wish for two meetings each month.

Among those present were Drs. Howell, Burge, Baird, Taylor, McDaniel, Moreland, Ira Ellis, McCurry, Cothern, P. W. Lutterloh, McAdams, Overstreet, Scott and Willett.

Dr. Willett extended an invitation for the next meeting to be held in the Clinic of Dr. Horner and Dr. McCracken. This invitation was accepted and the meeting will be held Thursday evening, January 6th.

No further business appearing the meeting adjourned.

Obituary

GRANT, R. L.—Dr. Robert Lee Grant, 62, died at Texarkana, December 6, 1926. He graduated from the Ohio Medical College, 1886, and located in Texarkana in 1889. He was Chief of Staff of the Michael Meagher Hospital and member of the board of trustees of that institution. During the World War Dr. Grant was a member of the Medical Advisory Board of Northeast Texas.

He is survived by his wife, one son, Robert L. Grant, Jr., and five brothers.

HARDIN, ROBERT—Dr. Robert Hardin died November 22, 1926. Aged 44. He was physician at the State Farm at Cummins, and died while riding in his automobile.

Dr. Hardin was born in 1882 at Okolona, and received his education at the University of Louisville. He had been physician at the State Farm since 1921. He is survived by his wife, three children, four brothers and three sisters.

THROGMORTON, HIRAM L.—Dr. H. L. Throgmorton of Pocahontas, died November 30, 1926. Aged 58. He had been taken to Jonesboro for an operation, following an illness of several weeks, but his weakened condition made the operation impossible.

Dr. Throgmorton is survived by his wife, a daughter and two sons.

MOORHEAD, W. H.—Dr. William Harvey Moorhead of Stuttgart died December 2, 1926. Aged 62. Dr. Moorhead died suddenly a few minutes before his usual hour for departing for his office duties.

Dr. Moorhead was born and reared in Pennsylvania and graduated from the University of Maryland.

Graduating in 1885, he began his practice in Kansas, later removed to Illinois. He came to Arkansas County in 1889, locating in DeWitt. Remaining there nine years, he moved to Stuttgart, where he lived 27 years. He was first President of the Arkansas County Medical Society, served as lieutenant in the Spanish American War and was a member of the Medical Advisory Board during the World War. Employed as Surgeon for Cotton Belt Railroad twenty-seven years.

He is survived by his wife and three sons, Earl, of El Dorado and Robert and Floyd of Iowa. His life was filled with good deeds that flow out of a heart that beats in sympathy with fellow human beings. His passing is a distinct loss to the profession and to the community in which he gave so many years of faithful service.

RICE, ROY—Dr. Roy Rice of North Little Rock, died November 18, 1926. Aged 48. He was a member of Arkansas Consistory No. 1, Al Amin Shrine Temple and Bendemeer Grotto. He is survived by his wife, a son and daughter all of North Little Rock; his mother, Mrs. C. M. Rice, two brothers and two sisters, all of Texas.

Book Reviews

Clinical Pediatrics.—By John Lovett Morse, M. D., Professor of Pediatrics, Emeritus, Harvard Medical School; Consulting Physician at the Children's Infants' and Floating Hospitals, Boston. Published by W. B. Saunders Company, Philadelphia, 1926. Price, cloth, \$9.00 net.

In this volume we find the author has laid especial stress on methods of physical examination and on differential diagnosis. Dr. Morse describes his method of treatment which he has found useful and which seem to him to be rational. Another feature is, he shows the futility and unreasonableness of much of the treatment in common use.

Gould's Medical Dictionary.—Containing all the words and phrases generally used in medicine and the allied sciences, with their proper pronunciation, derivation, and definition. By George M. Gould, A. M., M. D. Edited by R. J. E. Scott, A. M., M. D., Based on recent medical literature, with many tables. Published by P. Blakiston's Son & Co., 1012 Walnut St., Philadelphia. Price, \$9.00.

The new Gould's Medical Dictionary is based upon current medical literature and contains the terms in use in the related sciences, such as Chemistry, Pharmacy, Biology, etc. About 76,000 words are included. This work contains a number of illustrations.

The Modern Treatment of Hemorrhoids.—By Joseph Franklin Montague, M. D., F. A. C. S., of

the Rectal Clinic, University and Bellevue Hospital Medical College. Foreword by Harlow Brooks, M. D., F. A. C. P. 116 Illustrations. Published by J. B. Lippincott Company, Philadelphia. Price, \$5.00.

This work is a splendid digest of modern views as to the treatment of hemorrhoids. Concise statements are given concerning the vivid visual portrayals of the various methods approved by the profession. Photography and diagrams are used freely to furnish guides both to understanding and to treatment.

Electrothermic Methods in the Treatment of Neoplastic Diseases.—Designed as a Practical Handbook of Surgical Electrotherapy for the Use of Practitioners and Students. By J. Douglas Morgan, B. A., M. D., Instructor in Radiology, University of Pennsylvania Graduate School of Medicine, Philadelphia. Illustrated with 36 Line and Half-tone Engravings. Published by F. A. Davis Company, Philadelphia, 1926. Price, \$2.50 net.

The authors object in presenting this book is to supply to the medical profession, in general, a statement of the value of the electrothermic methods, a short account of the means by which desiccation and coagulation are produced, and the manner of their application.

The Surgical Clinics of North America (Lahey Clinic Number, 1926), Volume VI, Number III (Issued serially, one number every other month). 214 pages with 54 illustrations. Per Clinic year (February, 1926 to December, 1926). Published by W. B. Saunders Company, Philadelphia. Price, Paper, \$12.00; Cloth, \$16.00 net.

An article of general interest in this number of "Surgical Clinics" is one by Drs. Clute and Mason on "Medical Management of Patients Before Operation for Hyperthyroidism." We quote the last paragraph of this instructive paper: "Satisfactory results in the treatment of hyperthyroidism must be based upon an accurate diagnosis of thyroid toxicity, intensive study of the individual case, rational preoperative management, carefully organized surgery, and personal care following operation. Surgery is the only procedure of demonstrated merit for the cure of hyperthyroidism. Its so-called failures are due to inaccurate diagnosis or inadequate operation."

Materia Medical and Therapeutics, Including Pharmacy and Pharmacology.—By Reynold Webb Wilcox, M. A., M. D., LL.D., D. C. L., Professor of Medicine (Retired) at the New York Post-Graduate Medical School and Hospital; Formerly President of the American College of Physicians, and of the American Congress on Internal Medicine. Eleventh edition, revised in accordance with the U. S. Pharmacopeia, X, with index of symptoms and diseases. Published by P. Blakiston's Son &

Co., 1012 Walnut Street, Philadelphia. Price, \$5.00 net.

The book has been rewritten to comply with the recent issue of the U. S. Pharmacopeia. It is divided into two distinct parts, the first is devoted to "Materia Medica and Pharmacy," and part two "Pharmacology and Therapeutics."

There is a complete presentation of the official remedies and elaborate accounts of their pharmacological action and therapeutic uses.

The Scientific Basis of Chemotherapy.—By Iwan Ostromislesky, Ph.D., M. D. Formerly Director of the Chemotherapeutic Section of the Scientific Institute, Glavchimfarmzaw, Moscow. Obtainable from the author, 280 Broadway, New York City.

The author presents a new Dualistic Chemotherapeutic Theory and gives its relationship to Ehrlich's "Side-Chain Theory." He compares the mechanism of the curative action of salvarsan preparations, of quinine and of Pyridium. There is a chapter on the function of protective colloids in medical preparations, and detailed information as to the nature of Pyridium its chemical and physical properties, its biological constants and its possible therapeutic value. Pyridium is stated to have a group-selective action on the cocci genus, being bactericidal toward streptococci, Micrococcus Tetragenus, Staphylococci, Pneumococci, and diplococci of various strains. It appears to have a high penetrating power.

Medical Record Visiting List or Physician's Diary, 1927.—Published by William Wood & Company, 51 Avenue, New York. Prices are for 30 patients per week, \$1.75; for 60 patients, \$2.00; for 90 patients, \$2.50. Name can be stamped in gold for 25 cents extra. Name and address, 50 cents extra.

The 1927 edition of this well-known Visiting List is now ready. This handy little pocket volume has been the daily companion of thousands of physicians for many years, and is found much more trustworthy than cards or loose memoranda. The various tables of dosage, etc., have been carefully revised in accordance with the latest revised edition of the United States Pharmacopeia. Each page for recording calls has 30 lines and is ruled for one week. Those with pages dated for 1927 are limited in number. We have the same Visiting List with undated pages. These can be commenced at any time of the year and each page dated as used. Both styles are handsomely bound in flexible leather substitute with gilt edges. Size six and one-half by three and three-quarter inches.

THE JOURNAL

OF THE Arkansas Medical Society

PUBLISHED MONTHLY UNDER THE DIRECTION OF THE COUNCIL

Vol. XXIII

LITTLE ROCK, ARK., JANUARY, 1927

No. 8

Original Articles

JAUNDICE*

O. C. MELSON, M. D.
Little Rock

The study of jaundice as a symptom has been the subject of clinical and laboratory investigation for many years, and while it is readily recognized clinically, its interpretation may often be most difficult. In view of the recent advances made, it seems apropos to bring the subject before this body. Jaundice in every case is due to the presence of bile pigments in the blood. Clinically it is recognizable by the staining of the skin, mucous surfaces, conjunctivae, blood serum, and the urine. The latter may be absent in those cases of so-called acholuric jaundice, but urobilin is present.

At the present time, three types of jaundice are recognized. The obstructive, which is due to the obstruction of the flow of bile through the ducts with a consequent resorption of the bile pigments into the lymphatics and the blood stream; the hepatic, which is due to a functional impairment of the liver cells so that they are unable to excrete their products normally; and the hemolytic. Examples of the first type may be found in cases of cholecystitis with cholelithiasis; those of the second type in cases of hepatic cirrhosis, infectious or toxic hepatitis as in arsphenamine or chloroform poisoning; and those of the third in primary anemia and hemolytic icterus.

As stated above, the field of investigation of jaundice has been well trampled, the Greeks being reported as the first entrants. They are said to have produced jaundice by the ligation of the common bile duct. This experiment was repeated by William Saunders, an Irish phy-

sician in 1798, who may be considered the first of the moderns to establish the mechanism of obstructive jaundice.

At first, the whole bile was considered to be the instrument of jaundice formation, but with the discovery of the individual constituents of the bile, it was realized that the pigments alone were responsible. Therefore it has been through investigations of bilirubin, urobilin, and bile acids that we have been brought to the present state of our knowledge.

Without actually tracing the progress of this knowledge through all of its ramifications, I wish to bring before you some of the principal experiments, and their exponents. Bilirubin being the chief of the bile pigments has received most of the attention from the investigators. Virchow found that hematoidin could be formed from hemoglobin in blood extravasations, and with the chemical identity of hematoidin and bilirubin being proved by Jaffe, the foundation for the theory of the extrahepatic formation of bile pigments was laid. Following the lead of Lowitt, who found large deposits of iron and bilirubin in the Kupffer cells of the liver in hemolysis, McNee and Ashehoff formulated the theory that bilirubin was a product of the reticulo-endothelial system which embraces the Kupffer stellate cells of the liver, the sinuses of the spleen, the hemolymph glands, and the bone marrow. Experiments by Minkowski and Naunyn seemed to disprove McNee's conclusions, but the work of Whipple and Hooper, Mann and his collaborators, and Rich seem to prove beyond the peradventure of a doubt that bilirubin may be formed outside of the liver and most likely in the reticulo-endothelial system. This in the main is the accepted theory for the production of hemolytic jaundice today.

Urobilin is produced in the intestines by the reduction of bilirubin by the intestinal bacteria. It is found in small traces in the

*Read at the 51st Annual Meeting of the Arkansas Medical Society, Hot Springs, May 18-20, 1926.

urine and in hemorrhagic exudates. In cases where there is an obstruction to the flow of bilirubin into the intestine, there is a consequent absence of urobilin in the urine. Schneider has found that in pernicious anemia, the values of the urobilin and urobilinogen in the duodenal contents are increased.

The third constituent of the bile, the bile acids have not been thoroughly worked out. They are formed in the liver and are excreted by the intestine mainly, in part by the urine. In the obstructive and hepatic forms of jaundice they are usually increased. Studies upon the bile acids have shown that sometimes they are absent when the bile pigments are present. This phenomenon has been termed dissociation jaundice. It would lead to the inference that either the acids or the pigments are separately shunted from the biliary tract to the blood or lymph vessels of the liver. Its clinical significance has not been demonstrated.

Chemical reactions of the bile pigments have given the clinician two important tests, the Gmelin test, and the van den Bergh reaction. The former has been in use for over a hundred years, and stood alone in its field until 1921 when van den Bergh described the test which bears his name. Gmelin found that when nitric acid is added to bile that a series of colors resulted starting with green and running through blue to yellow and yellowish brown. He later successfully tested out the blood serum of a dog following the experimental ligation of the common bile duct, and then followed the application of the test to the serum of a patient with obstructive jaundice.

The origin of the Van den Bergh reaction may be said to have been in Ehrlich. He found that when sulphanilic acid and sodium nitrite were added to solutions of bilirubin a colored addition product was formed. This was known as azobilirubin. Later, Van den Bergh demonstrated the specificity of the reaction in serum in which the protein had been precipitated by the addition of alcohol. While studying the reactions upon bilirubin and human bile he made the discovery that the diazo reaction was positive in the bile even though the alcohol had not been added. He therefore concluded that there were two different reactions, one the direct in which a pink color appears immediately after the addition of the diazo reagent to the serum, and the indirect, in which the reaction occurs after the addition of the diazo reagent and alcohol to the serum. The direct reaction is always pres-

ent in obstructive jaundice and in hepatic jaundice it is usually present although it may be delayed. The indirect reaction has been of particular value in the differentiation of the hepatogenous and hemolytic types, as in the latter the direct reaction is rare. Van den Bergh found that the normal blood serum contains between 0.5 and 2 mg. of bilirubin per hundred cubic centimeters of serum. This gives the clinician accurate knowledge regarding the progression or retrogression of the jaundice. In cases where the jaundice may be latent, this is of especial value, as other signs may be absent.

From a clinical point of view one of the most important causes of jaundice is obstruction to the flow of bile from the liver, due to stone in the common duct. In this group the characteristic findings of biliary obstruction may be demonstrated. They are (1) jaundice, due to accumulation of bile pigment in the tissues and secretions such as the urine; (2) absence of bile in the stool, producing the familiar acholic clay colored stool; (3) pruritus, and (4) a delayed coagulation time of the blood. Depending upon the presence of infection, pain, fever, chills, and leucocytosis may be present. There may be gastro-intestinal disturbances such as anorexia, nausea, vomiting, with consequent malnutrition.

The severity of the jaundice is variable. If the stone is small and is passed thru the sphincter, or if it is of the ballvalve type and slips back into the dilated portion of the duct, the jaundice is transient and only a slight yellowish tinge to the skin and sclerae may be evident.

In more severe cases the jaundice may deepen and persist over a long period of time. There may be an accompanying enlargement of the liver, and in some instances the pain is severe. Usually in these cases there are attacks of fever and chills. The jaundice may be so deep that it has a greenish hue, and from a surgical point of view the patients with it are poor operative risks.

On account of the difficulty of diagnosis, carcinoma of the gall-bladder may be frequently overlooked. It may be present for a long time without the formation of jaundice. In many cases the jaundice is only slight. With the tests brought out by Van den Bergh an increase in the bilirubin of the serum may be demonstrated and the way for an earlier diagnosis be prepared. This condition is us-

nally associated with calculi, but they may be quiescent so far as symptoms are concerned.

As a cause of obstructive jaundice, carcinoma of the head of the pancreas is second to biliary calculi. This form of jaundice begins insidiously and gradually deepens. Coincidentally, there is marked wasting and weakness, due the loss of the action of the bile in the intestinal digestion. The law of Courvosier is familiar to you all, namely that a large gall-bladder in a painless jaundice means carcinoma of the head of the pancreas, and it is a valuable diagnostic sign. The carcinoma originates in the acini of the pancreas and spreads to the ducts which often are completely obstructed. The jaundice produced by carcinoma is not associated with glycosuria in contradistinction to that produced by a luetic pancreatitis.

Pressure from without the ducts may also be an etiological factor in the production of jaundice. Masses of glands such as are found in lymphosarcoma, Hodgkin's disease, and tuberculosis may produce jaundice in this way. Adhesions are a less common but possible cause. The jaundice accompanying post-operative stricture of the common duct is often very intense. The stricture is usually the result of trauma during cholecystectomy, but may be due to localized infection in the duct. In a series of such cases reported by Greene and others the serum bilirubin varied from 2.9 to 52.7 mgs. per 100 cc. of serum.

Infections of various types, such as typhoid, streptococci, staphylococci, and colon bacilli may produce obstructions to the flow of bile and a consequent jaundice by reason of the associated cholangitis and cholangiolitis. These infections may be primary in the biliary tract or they may be hematogenous. Sometimes the icterus persists for a long time and in some cases, when there is an enlargement of the liver and the spleen accompanying it a diagnosis of Hanot's cirrhosis may be erroneously made. Chronic infection of the gall-bladder may also cause jaundice even though there may be no calculi and no demonstrable bacterial invasion of the gall-bladder walls.

In those cases of obstruction to the biliary tract where surgical intervention is necessary for the removal of the obstruction, the demonstration of the presence or absence of jaundice is of vital importance. One of the results of increased bile pigments in the blood stream is the prolongation of the bleeding time; or, to put it differently, a delay in the

coagulation of the blood. This has been a source of worry and unhappiness to the surgeon, because of the frequency of post-operative hemorrhage. In 1921, Walters, of the Mayo Clinic, devised a method to overcome this difficulty. It consists in the intravenous or oral administration of calcium salts for a varying length of time before operation. The coagulation time of the blood is studied and when it has reached normal bounds, the patient may be safely operated upon. This method has remarkably reduced the mortality in cases of obstructive jaundice. Studies upon the serum bilirubin may disclose the presence of a latent jaundice, and these may receive the calcium treatment, so that their operative risk is decreased to a minimum.

The most common form of hepatic jaundice is the catarrhal form. Its mode of formation is still unsettled, but it is granted that there is a definite disease of the liver parenchyma. Virchow explained the jaundice by assuming the presence of a catarrhal duodenitis and the obstruction of the Oddi sphincter by a mucus plug in the duodenum. Eppinger's conception is that there is a definite parenchymatous change in the liver cells which results in hypersecretion of bile and an inability of the liver cells to direct its course to the ducts. He believes that the bile capillaries rupture and allow the bile to escape into the blood stream. Whatever the true explanation, it must be conceded a mild affection of the liver parenchyma from which the organ may completely recover.

The clinical symptoms are loss of appetite, epigastric fullness, constipation, and general malaise.

The sclerae become icteric and then the skin of the entire body. The feces may obtain bile pigments at times, and the urine may also contain bilirubin and urobilin at various stages of the disease. Because of the location of the disease, the liver is usually enlarged, but the spleen never. The duration of the attack is usually from three to six weeks.

This type of jaundice is to be differentiated from the epidemic jaundice which may occur in families, institutions, or larger communities. It is a disease of childhood and is transmitted by personal contact. The symptoms of the primary stage of the disease are nausea, vomiting, constipation, headache, generalized pains and fever. In four to six days the fever subsides and the jaundice appears. It is usually of a moderate yellow shade, and lasts

from a week to ten days, although it may last as long as several weeks. The pulse is rapid and there may be a leucocytosis of from sixteen to twenty-four thousand. The disease has a good prognosis.

Weil's disease or spirochetosis icterohemorrhagica is characterized by high fever, jaundice, hepatic and splenic enlargement, diarrhea and nephritis. The jaundice is due to primary disease of the liver produced by the parasite from which it receives its name.

In severe infections, such as pneumonia and typhoid, icterus may be present. What its true etiology is has not been accurately determined. By some it is thought to be of hemolytic rather than hepatic origin. Functional tests upon the liver have given inconclusive evidence; but they tend to support the view that there is a parenchymatous change in the liver.

Acute yellow atrophy of the liver is associated with a severe jaundice. There is a marked degeneration of the liver parenchyma and a diminution or absence of glycogen. This is a fatal malady with a rapid course.

Poisons such as chloroform, phosphorus, and arsenic may produce an icterus very similar in type to that of an acute yellow atrophy. This may develop after administration of salvarsan. Mild cases produced by the latter drug may recover if the treatment is abolished, but in severe cases the outcome is fatal.

An interesting disease producing jaundice is Hanot's hypertrophic cirrhosis of the liver. In addition to the jaundice patients with the disease suffer from periodic attacks of severe epigastric pain, fever, and enlargement of the liver and the spleen. There is no ascites. The disease is usually found in individuals in the third decade of life, and has been seen in several members of the same family. Splenectomy in a few cases seems to have a beneficial effect while in others it is useless. The jaundice may become very deep, and pruritus may be extremely annoying. Intercurrent infections due to lowered resistance from the repeated gastrointestinal upsets incidental to the disease are the usual causes of death. The jaundice has been found to be not of the obstructive type.

Jaundice is also produced by primary carcinoma of the liver and by chronic biliary cirrhosis. The course of the latter disease is much

like that of Hanot's cirrhosis and may be mistaken for it.

Hemolytic jaundice is an interesting disease and may be classed with the sphenomegalias. The erythrocytes of the blood are chiefly affected. There have been two types described, one by Minkowski, the congenital or familial, and the other by Hayem and Vidal as acquired. In the congenital or familial type several members of the same family and in several generations may be affected. The patient is jaundiced perhaps from birth, has a large spleen and liver and is in general not healthy. From time to time crises of acute pain, increase in the jaundice, enlargement of the liver and spleen, and fever occur. The patient usually succumbs to some intercurrent infection before middle life.

In the acquired form, the patients are somewhat older, and the course is much more rapid than the congenital type. The jaundice is not especially deep and there is no pruritus. It is not obstructive as shown by the indirect reaction obtained with the diazo reagent. Urobilin is present in the blood. Bile acids do not appear in the urine, and the stools are normal in color. There is an increased tendency toward hemolysis of erythrocytes in hypotonic salt solutions, the limits of concentration of the sodium chloride solutions being .6 per cent. Many reticulated red cells are found in the blood smears, and the size of the red cells is diminished.

Cure of hemolytic jaundice is accomplished by removal of the spleen.

The jaundice which appears in pernicious anemia and aplastic anemia is of the hemolytic type. The blood sera of patients with these affections show the indirect bilirubin reaction.

In conclusion, I wish to emphasize the value of the tests upon the serum bilirubin in the estimation of jaundice. The Van den Bergh test will distinguish between hemolytic jaundice and obstructive or hepatic; but it will not distinguish between jaundice produced by obstruction and that produced by hepatitis. The quantitative estimation of the serum bilirubin is of value in the cases of latent jaundice where the values may be higher than normal and still no demonstrable icterus is present. Finally, I wish to emphasize the value of the preoperative care in cases of obstructive jaundice by the administration of calcium salts to increase the coagulability of the blood and lessen the probability of severe post-operative hemorrhage.

TREATMENT OF METALLIC POISONING WITH SODIUM THIOSULPHATE*

Case Reports

D. W. GOLDSTEIN, M. D. Fort Smith

Revaut (1), 1920 of Paris was the first to use sodium thiosulphate in metallic poisoning. Drs. Dennie and McBride of Kansas City, Missouri, reported before the American Dermatological Association (2), 1922, on the use of sodium thiosulphate in arsphenamin dermatitis and certain other metallic poisoning. Dr. Jeffery Michaels of Houston, Texas, reports on the successful treatment of arsphenamin dermatitis with this drug in a paper read before the Texas State Medical Society (3), May, 1924. Recently Kuhn and Reese (4), have reported their results in which they confirm the work of Dennie and McBride. In the same Journal is an article by Haskell, Henderson and Hamilton (5), reporting experimental work on dogs with acute mercurial poisoning, in which they found sodium thiosulphate to be of no advantage after the metal is in the blood stream. Lawrence A. Kohn (6), reports sudden death in two cases of acute mercurial poisoning treated with sodium thiosulphate and summarizes by stating while he believes this drug to have value, it should not be administered to the neglect of other therapeutic measures.

METHOD OF ADMINISTRATION

Given up to two grams the drug is nontoxic. There is no reaction following its use. The drug should be chemically pure and solution should be freshly prepared. It is prepared same as neo-arsphenamin solutions in 10 c. c. of freshly distilled water. To obtain the best results it should be given intravenously. Oral administration 15 grs. usually given in solution by mouth. It is not definitely known whether the drug acts as a direct precipitant or frees the metal from the cell, aiding in its elimination. It is a fact that more of the metal is excreted after sodium thiosulphate injections.

I wish to report the following cases of acute mercury and arsenic poisoning:

Case No. 1. Miss R., professional nurse, age 19. Took 1 tablet $7\frac{1}{2}$ gr. mercury cyanide with suicidal intent two hours before admission to hospital. Vomited several times. Physician washed out stomach. Albumin given. I was called fifteen hours after admission. Urine showed trace of albumin and granular casts. Constant desire to stool. Stools watery. .6 gm. sodium thiosulphate intravenously given. Eight hours later 1 gm. was given intravenously. Patient complaining of pain in stomach. Next morning free of pain. 1 gm. sodium thiosulphate was given intravenously daily for seven days. Patient discharged well. Urine normal.

Case No. 2. Mrs. S. Patient admitted to hospital in semi-conscious condition; was unable to talk. Stomach immediately washed with sodium bicarbonate solution; no odor or color to washings. Patient finally decided to talk. Stated she had bought three mercury tablets and taken them one hour before admission. Drank water after taking them. Had no food for three hours previously. At this time $75/100$ gm. sodium thiosulphate was given intravenously. Eight hours later 1 gm. was given intravenously. Patient complained of pain in throat and stomach, also muscle cramp. Fifteen grs. sodium thiosulphate ordered given in solution by mouth t. i. d. 1 gm. sodium thiosulphate given intravenously daily for five days. Urine showed albumin, heavy trace, with granular casts next morning after taking mercury. Day of discharge showed slight trace, no casts. Examination of stomach contents by city chemists showed bichloride mercury.

Case No. 3. Mrs. W. Patient stated she had taken three $7\frac{1}{2}$ gr. bichlo. merc. tablets, Was taken four hours after taking food. Doctor was called half an hour afterward. Apomorphine was given; patient vomited small amount; 1 gm. sodium thiosulphate was given intravenously. She would not take solution given by mouth. During day, patient complained of severe pain in stomach, constant desire for bowels to move. Stools thin, watery, small amount of blood. Urine showed trace of albumin, granular casts. Patient would cry out with severe muscle cramp. 1000 c. c. saline given by hypodermoclysis was ordered and 1 gm. sodium thiosulphate was given intravenously eight hours after first dose. Next morning patient was free of muscle cramp, but complained of burning in stomach and throat. Sodium thiosulphate was continued

*Read at the 51st Annual Meeting of the Arkansas Medical Society, Hot Springs, May 18-20, 1926.

daily for six doses. Patient discharged end of seventh day. Urine normal.

Case No. 4. Mrs. G. Took one $7\frac{1}{2}$ grain bichloride mercury tablet, stating she took it by mistake for aspirin. Was taken on empty stomach. Doctor was called about one hour after she took it. Stomach was washed with 5 per cent sodium thiosulphate solution. 75-100 gm. was given intravenously. 8 oz. 5 per cent sol. was left in stomach. Patient complained of severe pain in stomach. Eight hours later 1 gm. sodium thiosulphate was given; one gm. sodium thiosulphate intravenously for four days. Patient vomited small amount of blood on second day. Other than this she had an uninterrupted recovery. Urine normal.

Case No. 5. Miss N., age 24. Had severe case of arsphenamin dermatitis with edema of face and extremities. It was impossible to give intravenous medication at this time, so the drug was given by mouth until edema had subsided, which was one week later, when 5 gm. sodium thiosulphate was given intravenously; then 1 gm. was given daily for five days and continued 1 gm. every other day for three doses. The drug was continued by mouth for five weeks. This was a severe case of arsphenamin dermatitis going through all stages of the disease. Complete recovery in eight weeks.

Case No. 6. Referred by Doctor G. G. Woods of Huntington, Arkansas. Mr. B., age 23, took one ounce of Fowler's solution arsenic one evening at 10 P. M. Had nothing to eat since 6 p. m. Drove forty miles to Fort Smith. Vomited one hour after taking the drug. When seen eight hours later he complained of severe pain in stomach. .5 gm. sodium thiosulphate given intravenously. Eight hours later received .75 gm. sodium thiosulphate. Patient stated burning in stomach was less, but complained of muscle cramp. Urine showed albumin slight trace, red blood cells, otherwise negative. Twenty-four hour specimen was examined, quantitative examination for arsenic was made 9 mg. was found. Kidney function (phenolsulphothalein) showed 60 X. Third day twenty-four hour specimen showed 90 mg. arsenic. Sodium thiosulphate 1 gm. was given for five days. Patient had uninterrupted recovery. About two months after this poisoning patient had stab wound of liver. Incision was made and liver was exposed during operation, which showed no gross pathological changes.

SUMMARY

1. Report of 4 cases acute mercury poisoning, 1 acute arsenical poisoning, 1 chronic arsenical poisoning.

2. The use of sodium thiosulphate given intravenously soon after the ingestion of the drug brought about a rapid cure without the distressing symptoms that usually occur.

3. It is urged that all hospitals and physicians have this drug on hand for immediate intravenous use in such emergencies.

(1) Presse Med., Jan. 28, 1920.

(2) Archives Dermatology and Syphilology, Jan. 1923.

(3) Texas State Medical Journal, May, 1924.

(4) A. M. A., Dec. 5, 1925.

(5) A. M. A., Dec. 5, 1925.

(6) Archives of Internal Medicine, Feb. 1926.

YOU AND I ETERNAL FRIENDSHIP LIFE AND DEATH

I was present when your mother went down in the valley of the shadow of death and saw you breathe and inhale the first atom of oxygen. I severed the maternal tie and gave you legal existence, and saw you open your eyes on a loving mother's breast. I signed the certificate that gives official notice to your country that another subject is born. They tell us this is life.

All your life be you Prince or pauper, day or night, fair weather or foul, I am at your beck and call. I sacrifice my rest, my pleasure and my strength to comfort you.

I rejoice with you in your hour of greatest happiness, and mourn with you in your hour of greatest grief.

I am your father confessor. I learn your secrets not breathed to another soul and keep them inviolate.

I will be with you when the sand of time has slipped through and you are nearing the eternal sunset and will see you exhale the last atom of oxygen. I will close the pale thin lids over the sightless eyes and straighten the form that lies cold and still and I will sign the certificate that announces officially to the world that you are dead.

I go with you from the cradle to the grave.

I am your family physician.

J. H. McCurry, Cash, Ark.

THE JOURNAL

OF THE

ARKANSAS MEDICAL SOCIETY

Owned by the Arkansas Medical Society and Published under the direction of the Council.

WILLIAM R. BATHURST, Editor
810-812 Boyle Building, Little Rock, Arkansas.

Published Monthly. Subscription \$3.00 per year; single copies 25 cents.

Entered as second-class matter, June 21, 1906, at the postoffice at Little Rock, Arkansas, under the Act of Congress of March 3, 1879.

Acceptance for mailing at special rate of postage provided for in Section 1103, Act of October 3, 1917, authorized August 1, 1918.

The advertising policy of this Journal is governed by the rules of the Council on Pharmacy and Chemistry of the American Medical Association.

All communications of this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the State. Notice of deaths, removals from the state, changes of location, etc., are requested.

OFFICERS OF THE ARKANSAS MEDICAL SOCIETY	
J. M. LEMONS, President.....	Pine Bluff
HENRY THIBAUT, President-Elect.....	Scott
G. E. TARKINGTON, First Vice-President.....	Hot Springs
T. F. KITTRELL, Second Vice-President.....	Texarkana
J. H. FOWLER, Third Vice-President.....	Harrison
R. J. CALCOTE, Treasurer.....	Little Rock
WM. R. BATHURST, Secretary.....	Little Rock

COUNCILORS	
First District—THAD COTHERN.....	Jonesboro
Second District—J. L. JONES.....	Searcy
Third District—M. C. JOHN.....	Stuttgart
Fourth District—W. T. LOWE.....	Pine Bluff
Fifth District—W. P. COOKSEY.....	Magnolia
Sixth District—B. C. MIDDLETON.....	Texarkana
Seventh District—DEWELL GANN, SR.....	Benton
Eighth District—ANDERSON WATKINS.....	Little Rock
Ninth District—SAM G. DANIEL.....	Marshall
Tenth District—THOMAS DOUGLASS.....	Ozark

COMMITTEES	
SCIENTIFIC PROGRAM—R. J. Calcote, Little Rock, chairman; A. S. Buchanan, Prescott; R. H. T. Mann, Texarkana.	
SCIENTIFIC EXHIBIT—C. E. Oates, Little Rock, Chairman; Homer Scott, Little Rock; D. E. White, El Dorado.	
MEDICAL LEGISLATION—Earle H. Hunt, Clarksville, chairman; J. W. Walker, Fayetteville; Thad Cothorn, Jonesboro.	
STUDENT LOAN FUND—E. F. Ellis, Fayetteville, chairman; J. H. Lenow, Little Rock; Wm. R. Bathurst, Little Rock; G. A. Warren, Black Rock.	
NECROLOGY—Cowley S. Pettus, Little Rock, Chairman; F. B. Kirby, Harrison; E. E. Barlow, Dermott.	
HEALTH AND PUBLIC INSTRUCTION—C. W. Garrison, Little Rock, chairman; F. Michael Smith, Pine Bluff; M. E. McCaskill, Little Rock; President and Secretary of State Society.	
CANCER CONTROL—Dewell Gann, Jr., Little Rock, chairman; John S. Jenkins, Pine Bluff; J. C. Hughes, Hoxie.	
INFANT WELFARE—A. C. Kirby, Little Rock, chairman; N. D. McCormack, Ft. Smith; H. W. Browning, Little Rock.	
HOSPITALS—J. D. Southard, Fort Smith, chairman; D. A. Rhinehart, Little Rock; J. T. Palmer, Pine Bluff.	

MEETING OF COUNCILORS

MID-WINTER SESSION, LITTLE ROCK

Wednesday, December 8, 1926.

Held at Hotel Marion, Little Rock. Called to order at 12:15 noon, Chairman Cothorn presiding: Councilors present: Cothorn, Jones, Gann, Cooksey, Douglass, John, Middleton, Watkins. Absent, Lowe and Daniel. Visitors present: Tarkington, Ellis, Lenow, Calcote, Garrison, H. T. Smith, Senator, Abington and J. L. Butler.

Chairman read a telegram from President Lemons and Councilor Lowe, regretting their inability to attend. Secretary Douglass was requested to send them suitable reply expressing our sense of deprivation.

At 1 p. m., Vice-President Tarkington was called to the chair, and Secretary Cothorn of the Council, read outline of proposed bill to be submitted to the coming General Assembly. He said he had quite a considerable correspondence with the secretaries of the different counties and had sent out form letters giving status of proceedings from time to time. The American Medical Association had also furnished helpful data and advice through its Bureau of Legal Medicine and Legislation, suggesting what we should undertake. It had been advised that effort be made to install a composite board, composed of a member from each Congressional District to consist of four regulars, two eclectics and one homeopath. It had also been suggested that eight members would be better; one from each District and one from the State at large. Of the eight, four to be regulars, two eclectics, one homeopath and one to be appointed without regard to the school of medicine he represents.

The secretaries of the three boards to be members of the new board; but after the first year no one to be eligible for membership on the board who was not a graduate or an alumnus of at least a class "B" school.

Provision for annual registration of physicians. This would involve a great deal of work, which some think unnecessary; as the Harrison narcotic records kept by the U. S. Internal Revenue Department show location of doctors.

That the board have full power to act, with practical elimination of useless restrictions.

Provision that adequate filing records be kept, showing data on all licentiates, the educational attainments, school attended, post-graduate work, etc.; the subjects to be ex-

amined on, same as now with jurisprudence physical therapy added, with theory and practice left out. Under the State law now, any one can practice physical therapy. We think it should be included in any new legislation. Then, that clause of the law would apply to any practitioner.

Standards not to be lowered in any way. Certificate of Graduation from a reputable school *only*, to be essential for examination.

Power to refuse, issue or revoke licenses by the board as it now is.

All licentiates from present boards to be given uniform certificates of registration, practically as at present. All records to be open for examination when anything is challenged as regards any licentiate.

Amendment to our criminal law, which should be embodied in the Medical Practice Act, prescribing conditions under which a physician may disclose evidence which may come to him professionally, as to abortion, murder, rape, moral turpitude and felony of grave import.

Dr. Cothorn reported that at a recent meeting of the examining board a case came up of the most outrageous type. It was one with the kind of evidence that your sense of justice would impel you to divulge the needed information; but the attorney objected; so that the doctors to whom the woman had confessed, were not permitted to offer her dying statement, and the evidence was ruled incompetent because it came to them in a professional way; objection was sustained and we could do nothing but dismiss the case with prejudice.

Some have suggested that it is an inopportune time to ask the Legislature for any change; but try to get along with the present law and endeavor to see that it is enforced. It has been suggested that five hundred dollars be expended in getting publicity by turning facts over to the newspapers. The high schools of the State would be a good field for propagandic work in an educational way in molding sentiment to promote our cause. Five hundred dollars used in that way would most likely save us from more trouble than we would have to reckon with than by asking for an entire new bill. In this meeting today we want you to tell us what your idea is and what you want as your best judgment seems to indicate. Commencing next week, acting secretary of this board and for the next board, he expected to get the matter before the profes-

sion of the State, and would write individual letters to every one of our members.

Chairman: I will ask Dr. Bathurst to express his views and open the discussion.

Dr. Bathurst: I hesitate to open the discussion of this subject, as I have come to this meeting with my mind made up to views that I fear are contrary to the general opinion of the medical profession. That is, I am firmly convinced that the existing law is satisfactory for our needs at the present time. The law states that applicants for examination in this State must be graduates of reputable schools. **THIS PARAGRAPH MUST BE ENFORCED.** I have been informed by a physician prominent in the Eclectic Medical Association that their board would no longer recognize applicants from the Kansas City School and at the present time will only recognize graduates of the Eclectic school at Cincinnati. If this is adhered to, I will favor in a few years a Basic Science Law, somewhat similar to one suggested by the Bureau of Legal Medicine of the A. M. A., to establish and to enforce through a non-partisan board uniform minimum requirements as to pre-professional education and as to ability in anatomy, physiology, chemistry, bacteriology, pathology, and hygiene for physicians (non-sectarian, osteopaths, chiropractors, naturopaths, and cults generally) of which I will have more to say later. I would like to see, however, at this time, a bill introduced that would change the date of the meeting of the examining board from May and November to June and December, and that junior students who exhibit zeal and peculiar fitness should be allowed to practice in certain selected rural communities, with certain limitations as to time.

Dr. John (Stuttgart): I believe we should be liberal enough to give every possible facility to those who practice the theories of other schools. I think every one who practices the art of healing should take some sort of examination before a State board; but so far as uniting with the eclectics and homeopaths, I do not see how we shall progress. It seems to me the greatest danger to conscientious work is contained in the activities of the osteopaths and the chiropractors. While it is true that some people are accused of great leniency and making it easy to pass the eclectic board, and if we had a composite board, we might control this diversion from the straight and narrow way and make better doctors of them—or none at all—at present I think it is debatable as

to whether a consolidation would be a good thing.

Dr. J. L. Jones: The composite board I believe to be the amendment we should work for now. That seems to be the trend of the times. Most of the States, at least nearly all of them that I am familiar with, have one board. We should have four regulars; two eclectics and one homeopath, thus combining all interests. I would not object if we had nine to fifteen members, just so we preserve our personnel at the ratio I named. I see no good reason for including the osteopaths. I do not believe we have over thirty in the State. To my mind it would be nothing but fair to give the regular physicians a majority on the board, the eclectics to have two and the homeopaths one, if they will agree to that representation. If deemed expedient, I would be willing to make the personnel, 5, 3 and 2.

There is another thing I would like to be enlightened on. The chairman in his summary referred to doctors being called as witnesses. If they should pass a law that he should divulge what he knows on information obtained from his patient, I believe it would be unconstitutional. A doctor cannot be compelled to expose professional secrets.

Dr. E. F. Ellis: I served as a member of the State Medical Board for eight years. After a great deal of thought given to this subject I have reached the conclusion that it would not be advisable to mix up with the eclectics and homeopaths in one conglomerate whole. I am aware that the A. M. A. are strongly in favor of one board; but I think it would hamper the regular board in its action, and I believe we ought to let our board stand and see that these other boards comply with the law. Crawford & Moses' Digest says that any applicant is eligible to examination who is a graduate of a reputable medical college. In our part of the country we are very much embarrassed by having to mold and improve these weak fellows sent out by the Kansas City College of Medicine and Surgery. We have some of their graduates located in our county. A few regular practitioners are benefitted by these fellows bringing patients to them.

Several years ago Dr. Wood introduced a resolution at one of our meetings, which would prevent any of our members meeting any of these men in consultation; under penalty of forfeiting his membership in the county society. This resolution was adopted by unani-

mous consent, and it was the sense of the society that it be rigidly complied with. As a consequence these fellows are trying to get out of our territory.

I really think we should make a strong effort to have the law strictly enforced as to the qualifications of applicants at all the boards; so that we may be relieved of the incompetency complained of.

I fully concur with Dr. Bathurst in his suggestion that competent juniors be allowed to practice in the rural districts where help is sorely needed. I believe that this privilege should be confined to students of the University of Arkansas, School of Medicine. This will be our meritorious defense to all the States that might be inclined to criticize our endorsement. It is my honest opinion, and Dr. Abington will no doubt agree with me, that if we attempt any change in the personnel of our board, we shall be very likely to have it disrupted. I think we should center our efforts on the prevention of the licensing of incompetents and foster a better medical service for our State. I think we should do our utmost to see that all laws pertaining to medical practice are strictly and conscientiously enforced.

Dr. Garrison: Frequently some doctor refers a certain matter to me alleging that a certain doctor is guilty of an irregularity and he is ready to prove it. I always reply that it is not my province to probe misconduct and refer them to the State Board of Medical Examiners. If something could be done that would put "punch" into the law, it would be a consummation devoutly to be wished for. I think that would be the judgment of those men who have had experience in medical practice, and they all would be strongly in favor of strict enforcement, regardless of whom it might affect.

Dr. Ellis: I would like to say to Dr. Abington, that it would be my idea to extend privileges to junior students of the U. of Ark. Medical School only, and certificate to be issued to them after they have completed the necessary examinations without any qualifications.

Dr. Calcote: I have always thought that it would be a difficult matter to assign the proper representation on a composite board. Just now the number of homeopaths is surely on the decline, and we believe that the eclectics will continue to fall off; so that in the future we ought to have increased representation for the regulars. I believe the Governor should

appoint at least a majority of the board from the ranks of the regulars.

Dr. Douglass: Any change is attended with considerable difficulty. We are making efforts in that direction. We have not fully formulated the bill which we think will be satisfactory to the majority of the practitioners in the State. By the time we get through with our alterations and corrections the father of that bill will not know his own child. It is my opinion that perhaps we might as well let well enough alone.

In our part of the country we have been troubled with the graduates of the Kansas City School; but I do not know if there is any way to compel the Eclectic Board to do its duty and decline to license these men. One of the best things to influence them in the right direction is publicity, and that is what they have been getting. The Kansas City School sends its graduates into Arkansas. We had some out in our part of the country. These men attended school in St. Louis for their college degrees and went to Kansas City for their doctor's degree, came to Arkansas for license and by reciprocity practice in other States. Of course, this is not right; but I believe the best thing to do is to let things stand as they are.

Dr. Ellis: We had this question up in one of the counties two or three years ago, and the matter was referred to our Attorney General. He was under the impression that under the provisions of the medical practice act we could not prevent graduates of the Kansas City College of Medicine and Surgery from coming up before our boards for examination, nor revoke their licenses, except for crimes, drunkenness, moral turpitude, felony, etc.

Dr. Anderson Watkins: I believe our committee should have the assistance of able counsel in formulating a medical practice act. I am sure that no fair-minded man will entertain any suspicion of the sincerity of the Arkansas Medical Society; but that their intentions are good and that they are honest in their effort to improve medical conditions. At the same time there are legal phrases that might have to be considered in judging of the terms employed in the proposed measure. So far as I am aware every one is insisting on fair play. We are likely to get into serious complications if we attempt too much, especially if we are without adequate legal guidance in legislative procedure. In Little Rock we have a man who is a graduate, who is accused of

doing a great deal of irregular practice. You know how difficult it is to prove these abortions, and I regret that the practice of surgery should be put to such base uses. A young man who is a son of a doctor in this State moved here. He made application for membership; but he was not admitted because his father had referred patients to this particular man, and the young man was often seen with the objectionable doctor. He is now a member of an adjoining county society.

With reference to the practice of undergraduates: I am of the opinion that we should heartily endorse the passage of a bill embodying the following:

A BILL TO RELIEVE THE SCARCITY OF RURAL PHYSICIANS

(1) The tuition paid by non-resident students in the Arkansas School of Medicine, and any donations for the purpose, are to be placed in a fund to be known as a "student loan fund."

(2) The Advisory Board of the School of Medicine to have charge of the fund, and it is authorized to loan at the rate of six per cent per annum, not exceeding four hundred dollars each in any one year, to students attending the School of Medicine, who are deserving citizens of this State, and who are shown to be in need of assistance to complete their medical education. Loans and interest accrued to be repaid within five years; and the sums repaid are to be replaced in this fund. Preference in making such loans to be given to the students nearest graduation, who will agree to practice in a rural community, or in a town in Arkansas having not more than one registered physician, for a period of one year after graduation.

(3) As a further means of providing medical attention in rural communities the Advisory Board of the School of Medicine is authorized to issue a temporary permit, revocable at pleasure, to any student who has completed his third or junior year in the School of Medicine of the University of Arkansas, authorizing such person to practice medicine in a designated rural community, or town, having not more than one registered physician, for a period not exceeding fifteen months from the date of the completion of the third, or junior year in the School of Medicine but not longer.

We also favor the amendment of the law so that the examinations for license to practice medicine may be held on the second Tuesdays of July and January, instead of the same time in May and December, as at present.

We offer these suggestions for your consideration and trust that it may be deemed feasible for the State Medical Society to endorse such an act, in the coming General Assembly.

Dr. H. T. Smith: Mr. Chairman, I would like to ask what would be the effect of the legislation proposed by Dr. Watkins. Would it interfere with our reciprocity arrangements?

Dr. Cothorn: It would.

Dr. Smith (resuming): At one time I thought we should have the one board, and our association in a meeting of this kind held some two years ago, practically agreed to such a measure; but when I thought of the class of people that would become members of the composite board, I had my misgivings as to its success. I have changed my mind completely now. Up to that time I thought we would succeed best with the one board law.

Dr. Middleton: After listening to the suggestions offered, I see that most of those who have spoken are in favor of the one board bill; but Dr. Ellis, and some of the others, who have had a wide experience in matters of this kind, have made the point that the eclectics and the homeopaths are on the decline and that it will be only a few years till they will cease to annoy and perplex us. I do not know of one town between here and Texarkana that can boast of an eclectic. The Kansas City College was supposed to be an eclectic school; but I do not know of any eclectic men in our section. I think, if possible, we ought to take steps to prevent a recurrence of this Kansas City infliction, although our hope of success may be very slim. It is very doubtful in my mind whether it would be advisable for us to join hands with the eclectics and homeopaths. I rather think we shall have to deal more with the osteopaths in the future. I think the suggestion that we permit the juniors to practice medicine for a limited time is very good and will prove to be an efficacious relief measure, although it seems to me that fifteen months is too long; for that might tend to encourage the junior student to lay off from school for a year, which would be to his disadvantage when he resumes his studies, and will prove a detriment to the profession as a whole.

Dr. Dewell Gann, Sr.: I have thought for a long time that one board would give us a better standing, and I would be in favor of it if we could put it over; and I would be willing to leave the selection of the members

to the good judgment of the Governor, or whoever is authorized to make the appointments. When the eclectics and homeopaths die off, as prophesied here, we would finally have all allopaths. I think it a bad precedent to grant an undergraduate permission to practice medicine without an embargo or time lock on him. I know men who say they are as good doctors as any one else. Two of them have had only one course at school. I think this is a mistake.

I believe it should be the duty of our board of examiners to investigate every case of alleged misconduct that is brought before them, and they should have authority to revoke a license when the welfare of the community was to be safeguarded. Let justice be done though the heavens fall.

Dr. J. L. Jones: I am in favor of the composite board. This plan may present difficulties, but I believe it best for our present need. In our county we had a man who had been out to Kansas City to learn medicine the easy way. He had never had any experience in obstetrics yet he accepted a labor case. I was called to assist and found him attempting a forceps delivery when it was not a forceps case. The board should have authority to cancel that man's license. I would not give him the least bit of consideration.

Dr. Bathurst: I had no idea the subject was so intricate. It is hardly possible to discuss all the phases in a single meeting. I find that there is a consensus of opinion that having a majority vote in one board our troubles would be ended; that this would cure everything. I believe this impression is more fanciful than real. The homeopaths do not want to join and the eclectic crowd will not do so unless we give them a distinct advantage. I am led to this conclusion after talking with a number of them.

Dr. John: Instead of having one board I believe we should require all applicants to furnish data showing their school records, their requirements and credit for certain college units before they can come before the board for examination and practice in this State. It seems to me the Eclectic Board should co-operate with us in trying to pass a bill requiring everybody seeking to practice medicine in Arkansas to be a graduate of a reputable medical college.

Senator Abington addressed the meeting. He expressed his appreciation of the invitation to be a guest at the midwinter session of

the Council and the opportunity to exchange views and for him to explain his position in the past, which had invited criticism. He was sorry that the committee did not offer the bill at the last session of the General Assembly, according to his suggestion. As a Legislator he represented the whole people of Arkansas and he was impressed with the lack of medical help in the rural districts and to their assistance he centered his most earnest effort. In many cases there was not a physician within ten or twelve miles of a locality after the old family doctor had moved away or died. To relieve their distress he was willing to relax to some extent the rule requiring a pre-medical college course and admit applicants to examination with four years of approved high school credit or its equivalent. The matter had been a bone of contention in a political way for some time, and he had tried to represent a majority of the people. He believed the suggestion to license juniors temporarily would relieve the stress to a great extent, and he was willing to withdraw his opposition to the pre-medical course requirement if the privilege of temporary license could be extended to the juniors to practice in the rural sections.

He believed that students presenting high school credits for four years work should be licensed if proven competent; but he would stipulate that the board be "hard-boiled" in its action, and "prove all things" before passing candidates for license. He was confident if it were deemed best to have a single board, the Governor should appoint the members without regard to the schools; but according to the numerical strength of the profession.

He would oppose any change in the law regarding privileged communications, as he would not like to be compelled to take the witness stand and testify as to something which had been committed to him in confidence, or else lie about it.

The Kansas City College of Medicine and Surgery was a dead issue he said. It was closed and in the hands of the Department of Justice at Washington, and they will look into this place very closely.

As to fifteen months being too long long to grant a temporary license to junior students, he did not think so. For some reason there had grown up in Arkansas Legislature a false impression that the medical profession all over the State was trying to stifle competition in business by making restrictions such that every

youth in Arkansas who decided to equip himself for the practice of medicine would have his progress impeded by embarrassing entanglements, and they wonder how he is ever going to get money enough to complete his medical education. We emphasize this when we require two years of college work in addition to four years high school credits for admission to a Class "A" medical school, he said.

Chairman Cothorn: There have been some points brought out that I wish to discuss briefly. Dr. Jones' question about having the uniform requirement that doctors should be graduates of reputable medical schools: We have that law now and it applies equally to all the examining boards. We have had this thing to contend with for some time. Two or three years ago we met a committee from some of the other schools. I believe Dr. Bathurst and Dr. Jones were with us and our attorney was present; but we had no data to give. The law requires that the secretary of the board shall make a written report to the Governor annually. If we had just a little enforcement of the law these reports would be given out by all boards.

Dr. Cothorn explained that prosecutions have to be handled through the grand jury and showed how difficult it was to obtain evidence in cases of criminal abortion, and the inhibition against the testimony of a doctor in regard to his patient. He can only testify as to the conditions he found and hearsay evidence is, of course, not competent. The reciprocity relations we have with other States benefit the practicing physician who has been out of school for years and likely to be rusty on his primaries. If he is ethical and worthy his home board can generally secure for him the privilege of reciprocity, in whatever State he may wish to practice.

Dr. Ellis: I believe it is the sense of the meeting that we continue under the old law and make some amendment, rather than attempt to get a new law entirely. I move that we take a vote to ascertain if we desire to continue to operate under the present law, with such needful modification as we may be able to secure.

Dr. Abington: I agree with you that the State board should have some discretionary power to grant these temporary licenses under the present law. I would favor that the State give them that authority. I think the law should be that any physician may appear for examination if he can show that he has

qualifications equal to those he should have from a reputable school of medicine, either regular, osteopath or eclectic.

Dr. Ellis motion being put, it carried.

Dr. Ellis: I move that a committee be appointed to confer with some capable lawyer to ascertain whether or not there is any provision in the law compelling the eclectic and homeopath board to pass only those men who have graduated from reputable medical schools. I think there is where our trouble lies. The law should be invoked to shut out the men from the "diploma mills."

Dr. Watkins: The Kansas City School was organized by a few physicians for the purpose of making money. We will have to make another fight upon them, as I understand they have only changed their name. We find our boards do not always detect inefficiency in the matter of qualifications. Let us not forget past experiences. These things actually occur.

Chairman Cothorn: I will ask that the board, the Councilors and the Pulaski County Medical Society co-operate with our committee on legislation, and through their combined effort we may hope to win our goal.

Dr. Calcote, in behalf of the Program Committee, reported progress and said the date had been decided for the meeting, May 11-12-13.

A number of outstanding medical men were expected, including Robinson of Nashville, and Rosser of Texas.

Chairman congratulated the committee on the proposed program.

Dr. Lenow reported that the sum of two hundred dollars appropriated at the last meeting of the Council for a marker, commemorating the first legal dissection in Arkansas to be erected in the City Park, Little Rock, had been found inadequate, and asked that one hundred dollars additional be granted for its completion. On motion of Dr. Jones, the additional sum was granted as requested.

The General Session adjourned at 2:50 p. m. and Council reconvened at 2:55 p. m. in Executive Session. Dr. Cothorn presiding.

The resignation of Dr. Wm. R. Bathurst, Secretary-Editor was offered, who retired from room pending discussion.

On motion, chair appointed, Drs. Ellis, Jones and Tarkington a committee to confer with Dr. Bathurst. Committee retired and returned in a few minutes, reporting that they had prevailed on Dr. Bathurst to withdraw his resignation.

After some discussion, on motion of Dr. Douglass, seconded by Dr. Ellis, Dr. Bathurst was empowered to employ such assistance as he might deem necessary in prosecuting his work.

On motion the Committee on Scientific Program was allowed the sum of one hundred dollars to apply on railroad fare and traveling expenses of invited guests attending the annual meeting.

On motion the sum of two hundred dollars was allowed to apply on complimentary subscriptions to *HYGEIA*, to persons most interested in medical education and community welfare throughout our State. List of names to be prepared by the secretary, and appropriate notice to accompany each subscription.

On motion the secretary was instructed to pay the legal expenses incurred by State Medical Board in some recent litigation involving revoking of license for unethical conduct.

On motion the Council instructed the secretary to pay the incidental expenses of the mid-winter session, including railroad fare and hotel expenses of invited guests.

Plans for assisting the committee on legislation during the coming session of the General Assembly were discussed, and the chair appointed Dr. Watkins and Dr. Rhinehart as members of auxiliary committee in connection with the committee on legislation. On motion the auxiliary committee was empowered to add other members to their number as they see fit.

On motion, executive session adjourned at 3:35 p. m.

County Societies

COLUMBIA COUNTY

(Reported by T. H. JONES, Sec.)

The Columbia County Medical Society met in Magnolia, January 11, 1927, for a regular business meeting and election of officers.

Present: Horn and Jordan of Taylor; Smith, Hunt, Cooksey, Stevens, McWilliams, McLeod, Baker and Jones of Magnolia.

The following officers were elected for the ensuing year: President, G. T. McLeod; Vice-President, W. J. Hunt; Secretary, T. H. Jones; Delegate to the Annual State Meeting W. H. Horn; Alternate, J. J. Baker.

CRAIGHEAD COUNTY

(Reported by THAD COTHERN, Sec.)

The Craighead County Medical Society held its first meeting for 1927, January 6, in the

office of the clinic of Drs. Willett, Horner and McCracken. The meeting was called to order by the outgoing president, who then surrendered the gavel to Dr. S. W. Moreland, who had been elected president to guide us in our studies and work for the present year.

Dr. Moreland responded with a very timely and scholarly address, which was a real inspiration and intellectual treat.

The minutes of the last meeting were then read and the routine business disposed of. Drs. Howell, Ramsey and Willett were appointed on the program committee to outline our course of study for the year and to arrange with the various members for papers and quizzes as we go along.

Dr. H. H. McAdams read a paper, "The Medical Management of Simple Non-Surgical Goiter." This paper was one of the best that has ever been our good fortune to hear and everyone present had something to say in discussing it. The appreciation was so great that a motion was made and unanimously carried that Dr. McAdams read this paper at the next meeting of our State Medical Society so the profession of the whole State could be helped by it.

It was decided that the program for the next meeting be in the form of a quiz on "The Various Types of Skin Eruptions." Dr. Ira Ellis was selected as quiz master for the meeting.

The Jonesboro clinic extended an invitation for the meeting to be held in their building which was gladly accepted. This meeting will be held Thursday, January 20th, at 7:30 p. m.

Present: Howell, Burge, Baird, McDaniel, McCurry, Ira Ellis, Nisbett, Moreland, Altman, Cothorn, P. W. Lutterloh, McAdams, McCracken, Pratt, Ramsey, Overstreet and Willett of Jonesboro.

FRANKLIN COUNTY

(Reported by THOS. DOUGLASS, Sec.)

The regular annual meeting of the Franklin County Medical Society was held at the Bristow Hotel, Ozark, December 14th. This was one of the best meetings ever held. An excellent dinner was served. Each year Mrs. Bristow tries to serve a better dinner—and succeeds. The President, Dr. Blackburn, was toastmaster and emphasized the home-coming at Christmas time idea.

Present: Post, Higgins and Mooney (Dr. Mooney was elected a member at this meeting)

of Altus; Blakely of Coal Hill; Blackburn, Porter, Hansberry and Douglass of Ozark; Campbell of Webb City. Visitors attending were: H. C. Dorsey of Holt Clinic, Fort Smith; O. M. Bourland, Van Buren; J. A. Wigley, S. C. Grant and O. J. Kirksey, Mulberry.

Dr. Porter read a paper on "Cancer of the Cervix," written by Dr. D. A. Rhinehart. It was well received and discussed.

Many good speeches were made in happy vein. The newly wedded member, Dr. Post, received many hearty congratulations.

Officers elected for the ensuing year were as follows:

President, E. W. Blackburn (re-elected); Vice-President, A. J. Hansberry; Secretary, Thos. Douglass (re-elected); Delegate to State Medical Society, J. L. Post; Alternate, Thos. Douglass.

JEFFERSON COUNTY

(Reported by J. C. BEARD, Sec.)

The Jefferson County Medical Society got off to a good start for the coming year. The officers are: J. T. Palmer, president; J. W. John, vice-president; J. C. Beard, secretary; O. C. Hankinson, delegate to State Convention, and T. W. Woodul, alternate delegate.

The Society held its first meeting of the year at the offices of Drs. Palmer, Lowe and Beard Tuesday evening, January 3rd, with President Palmer presiding.

Present: Drs. Woodul, Higginbotham, Troupe, Gurney, Lemons, John, S. E. Smith, F. M. Smith, McMullen, Lowe, Hughes, Tankersley and Beard.

Dr. McMullen reported the program committee had been at work. Dr. Capel had agreed to read a paper at the February meeting, and the other members of the society had been paired off to read and discuss papers at the succeeding meetings.

Dr. Lemons presented a case for discussion and diagnosis. The patient was a negro boy about fifteen years old. He had marked edema of feet and legs and ascites. The liver was enlarged to four finger breadths below the costal border. The spleen could not be felt. There was diastasis recti. There were coarse moist rales throughout both lungs. The heart was apparently normal. There was no jaundice. There was a "round table" discussion of the case, but it was impossible to make a definite diagnosis at that time.

Other members presented interesting cases.

Dr. Tankersley read an interesting paper on "sympathetic Ophthalmia," and said that in spite of a great deal of study, the etiology of this dread disease was still unknown. She said there were different theories as to its etiology; some claiming that it is a cytotoxic, or anaphylactic reaction, while the consensus of opinion is that it is of bacterial origin. It always follows penetrating wounds of the eye, in some instances coming on as late as forty years after the injury.

She thought that in every case of penetrating wound of the eye where sight is lost, the eye should be enucleated, thereby removing the risk of a sympathetic ophthalmia, and a total loss of sight in both eyes.

Dr. Hughes discussed Dr. Tankersley's paper. He stated that he, along with other good ophthalmologists, believed in the microbic theory of the disease. He said that where there is not a total loss of sight in the exciting eye, some doctors advocate removing the sympathetic eye. However, he did not agree with them, he said.

MISSISSIPPI COUNTY

(Reported by F. D. SMITH, Sec.)

The Mississippi County Medical Society met in Blytheville, Tuesday, December 14th.

Present: Massey, Hudson, Tidwell, Luckett, Owen, Sims, Saliba, Wilson, Harwell, Usrey, Husband, Grimmett and Smith. Drs. Thad Cothorn, Jonesboro and W. P. Hutchins, Manila, were visitors.

Officers were elected for the ensuing year:

President, R. P. Nall (re-elected); First Vice-President, L. D. Massey; Second Vice-President, J. L. Tidwell; Secretary-Treasurer, F. D. Smith (re-elected); Censor, J. A. Luckett.

Talks, outlining the work of the Society for next year, were made by several members.

Adjourned to meet in Osceola, January 11.

MONROE COUNTY

(Reported by W. L. BOSWELL, Sec.)

The Monroe County Medical Society met in Clarendon, Tuesday, December 14, at 8:00 p. m., at which time the following officers were elected:

L. H. Stout, Brinkley, president; M. F. Houston, Clarendon, vice-president; E. D. McKnight, Brinkley, secretary-treasurer; W. L.

Boswell, Clarendon, censor (three years); C. H. McKnight, Brinkley, Delegate to State Society; N. E. Murphy, Clarendon, alternate.

Several interesting cases were reported and discussed.

Miss Hortense Murray, county health nurse, was present and outlined the work she wants to carry out during 1927, and asked the cooperation of the medical society, which was promised her.

The Washington and Benton County Societies are planning a joint meeting to be held at Rogers, Thursday, January 27th. Last year the meeting was held at Fayetteville, at which time the St. Louis physicians were guests. This year the intention is to give an *All Arkansas* program with papers by the following Little Rock physicians: C. W. Garrison, Dewell Gann, Jr., H. Fay H. Jones, F. Vinsonhaler, W. D. Rose, D. A. Rhinehart and F. W. Carruthers.

Discussion of these papers will be opened by other invited guests. This indicates an intellectual feast and a most helpful meeting, with good fellowship thrown in.

This joint meeting will take the place of the regular February meeting of these Societies. The JOURNAL wishes them both a most delightful time.

Personal and News Items

Dr. Robert Caldwell was elected Chief of Staff of St. Vincent's Infirmary, Little Rock, at the annual meeting held December 14th. Dr. Caldwell succeeds Dr. Gann, who resigned after having held the position for five years. Other department heads elected were: Drs. John R. Dibrell, A. C. Shipp, S. B. Hinkle, H. W. Browning, Pat Murpley, William R. Bathurst, Frank Vinsonhaler, S. C. Fulmer, E. J. Mahoney, D. A. Rhinehart, M. E. McCaskill, W. D. Rose, F. W. Carruthers, H. F. H. Jones, M. J. Kilbury and Dewell Gann, Jr.

Dr. J. M. Muse of Conway, is taking some post-graduate work at Tulane University Medical School.

Dr. John R. Dibrell of Little Rock was recently appointed by Gov. Terral as a member of the State Board of Health.

Dr. Anderson Watkins of Little Rock was elected president of the Pulaski County Medical Society at the regular meeting held De-

cember 13th. Other officers elected were: Dr. Roy T. Lewis, vice-president; Dr. William R. Bathurst, re-elected treasurer; Dr. R. J. Calcote, re-elected secretary. Dr. M. E. McCaskill was made executive of the Board of Censors.

The following Arkansas physicians recently visited in Little Rock: J. J. Johnson, Harrison; G. S. Brown, Conway; J. M. Phillips, Benton; C. T. Drennen, Hot Springs; J. C. Minor, Hot Springs.

New charters have been issued to the following component societies of the Arkansas Medical Society: Baxter, Benton, Columbia, Craighead, Crawford, Franklin, Grant, Hot Springs, Jefferson, Johnson, Miller, Nevada, Pulaski, St. Francis and Woodruff.

WANTED—Salaried appointments for Class A physicians in all branches of the medical profession. Let us put you in touch with the best man for your opening. Our nation-wide connections enable us to give superior service. Aznoe's National Physicians' Exchange, 30 North Michigan, Chicago. Established 1896. Member the Chicago Association of Commerce.—(Adv).

The Union County Medical Society elected the following officers for 1927: President, J. Vance Ferguson; Vice-President, J. W. Slaughter; Secretary-Treasurer, M. V. Russell; Delegates to annual meeting, J. B. Wharton and J. A. Moore; Alternates, S. J. McGraw and J. W. Slaughter. Preceding the meeting for the election of Officers, Dr. J. B. Wharton was elected chief of staff of the Warner-Brown Hospital, with Dr. G. C. DeBolt secretary.

Dr. L. D. Duncan of Waldron, health officer and coroner of Scott County, was appointed by Governor Terral as a member of the State Board of Health to succeed Dr. E. H. Stevenson of Fort Smith. Dr. Duncan was appointed for a four-year term. He graduated from the University of Arkansas School of Medicine in the class of 1897. He has been practicing medicine in Scott County for nearly 30 years and for the past 12 or 15 years has been elected coroner at each biennial election without opposition. He also has served as county health officer for several years.

Dr. E. M. McKenzie of Hot Springs has recently been at St. Vincent's Infirmary, Little Rock, for treatment.

Dr. L. L. Marshall of Little Rock has resigned as member of the State Board of Health and of the Eclectic Board of Medical Examiners.

MARRIED: Dr. B. A. Bennett and Miss Lorena Armstrong of Little Rock, were married November 23, 1926. Dr. Bennett has removed from Paris to Little Rock and has opened an office in the Federal Bank building. Dr. W. A. Snodgrass and Miss Margaret Turner, both of Little Rock, were married January 3, 1927.

Dr. J. R. Linzy, physician at the Arkansas Confederate Soldiers' home, has resigned, effective January 1, and will enter the practice of medicine in Little Rock about February 1. Dr. Linzy plans to go to New Orleans to take post-graduate work in general practice.

Dr. and Mrs. T. J. Woods of Evening Shade celebrated their golden wedding anniversary December 27th. They were married in 1876, at the home of Dr. O. T. Hunt of LaCrosse, Arkansas, with the Rev. Garrison officiating. A unique feature in connection with this anniversary is the fact that the four people who were their attendants at their marriage are still alive, and all four wrote letters of congratulation to the two principals on the recent occasion.

At the meeting of the Pulaski County Medical Society held at the Public Library, Little Rock, December 13, 1926, the following officers were elected: President, Anderson Watkins; Vice-President, Geo. V. Lewis; Treasurer, Wm. R. Bathurst (re-elected); Secretary, R. J. Calcote (re-elected).

President Watkins has since announced the following committees: Scientific Program: R. J. Calcote, Chairman, J. H. Sanderlin, and S. C. Fulmer. Public Health and Legislation: J. R. Wayne, Chairman, C. W. Garrison, and D. A. Rhinehart. Social Entertainment: Homer Scott, Chairman, C. C. Kirk, and P. L. Mahoney. Credentials: W. E. Gray, Chairman, W. A. Snodgrass, and G. W. Reagan. Printing, Finance, and Claims: E. H. White, Chairman, J. H. Shuffield and R. M. Blakely. Board of Censors: H. A. Higgins, Chairman, William E. Jones and M. E. McCaskill.

FOR SALE: VICTOR X-RAY, bedside unit with accessories. A-1 condition, for one-half original cost.—Address Journal, Arkansas Medical Society, Little Rock, Arkansas.

RESOLUTIONS

On the death of Dr. Leonidas Kirby, Harrison.

By M. & N. A. Ry. Surgeons, Searcy, December 27, 1926.

In the Providence of Almighty God, our beloved colleague has been taken from us by the hand of death. We are conscious that in such an extremity human consolations do not avail, but we desire to spread upon our records some expression of our affection and esteem for our friend and brother.

He was a scholar of rare attainments and a leader of great ability.

He was a gentleman. He embodied the virtues of his Puritan ancestry, supplemented by the traditional graces of the best manhood of the South.

He was a friend. The medical profession of the State went to him for counsel and encouragement.

Therefore, be it resolved, That the M. & N. A. Ry. Surgeons record their sense of personal bereavement and official loss in the death of Dr. Leonidas Kirby.

Be it Further Resolved, That we extend to the members of his family, our deepest sympathy in their great loss and that they be furnished with a copy of these resolutions and that a copy be also sent to the Journal of the Arkansas Medical Society.

Respectfully submitted,

Dr. R. J. Hall,

Dr. J. W. Nichols,

Dr. E. D. McKnight,

Committee.

UNIVERSITY OF ARKANSAS NOW
BROADCASTING MEDICAL PAPERS

The University of Arkansas radio station KUOA, on January 6th, inaugurated a weekly "Medical Extension Service" under the direction of Dr. Allan A. Gilbert, University physician. "The Treatment of Malaria" by Dr. C. C. Bass, dean of the Tulane Medical School, New Orleans, was the subject of the first lecture of the medical extension series.

Each Thursday evening at 8 o'clock a special paper on medicine or surgery and allied subjects will be broadcast from the University station for the benefit of physicians. The papers are to be prepared by outstanding men in the medical profession throughout the United States.

Among the noted medical leaders of the country who will contribute papers on subjects in their respective fields are the following: Dr. George Dock, Pasadena, Cal., dean of Medical Educators; Dr. William J. Mayo, Rochester, Minn., surgery; Dr. F. M. Potteuger, Monrovia, Cal., tuberculosis; Dr. Nathaniel Allison, Harvard Medical School, Orthopedic surgery; and Dr. W. McKim Marriott, dean Washington Medical School, St. Louis.

The program for the remainder of the month of January is as follows:

Jan. 13—"Backward or Defective Children, Physical and Mental, Due to Disorders of the Ductless Glands," by Dr. William Englebach, St. Louis.

Jan. 20—"Symptoms, Signs and Methods Available for Early Diagnosis of Alimentary Tract Cancer," by Dr. Frank Smithies, Chicago.

Jan. 27—"Some Aspects in the Management of Diabetes," by Dr. F. G. Banting, University of Toronto, Canada.

The Faulkner County Medical Society, at its regular monthly meeting held December 18, elected the following officers for 1927: President, T. C. Watson, Mt. Vernon; Vice-President, J. H. Downs, Vilonia; Secretary-Treasurer, J. S. Westerfield, Conway.

The Committee on Scientific Program of the State Society has announced Wednesday, Thursday and Friday, May 11th, 12th, and 13th as dates for the Annual Session at Little Rock, in 1927. Extensive arrangements will be made to carry out the custom of making every meeting better than the previous one. We invite you now to be with us.

Announcement is made that The American College of Physicians will hold its Eleventh Annual Clinical Session in Cleveland, Ohio, February 21-25, 1927. Dr. Alfred Stengel of Philadelphia is president of the College and Dr. John Phillips of Cleveland is the chairman of the program committee. The program will be of unusual interest to internists (including neurologists, pediatricists, roentgenologists, pathologists, dermatologists, psychiatrists and others engaged in the field of internal medicine). The Cleveland hospitals and the Western Reserve University will cooperate with the College in the presentation of the program. These programs constitute each year a post-graduate week on internal medicine of outstanding merit.

During the mornings, there will be clinics and demonstrations at the various hospitals and in the laboratories of the Western Reserve University; during the afternoons, papers on various medical topics will be delivered by local members of the profession and by members of the College from other parts of the United States and Canada; during the evenings, there will be formal addresses by distinguished guests, American or foreign, and by the president or other representatives of the College.

The American College of Physicians is a national organization in which internists may find a common meeting ground for discussion of the special problems that concern them and through which the interests of internal medicine may have proper representation. Membership in this organization is limited to those in the field of internal medicine. While it is not a limited national society of specialists (mostly prominent medical teachers), it is not co-ordinal with large national or sectional organizations of physicians requiring no special professional qualifications. Its standards are high and many men of distinction in the profession are numbered among its members.

An invitation has been extended by the College to all qualified physicians and laboratory workers to attend the Cleveland Clinical Session. An attendance in excess of fifteen hundred is anticipated.

Obituary

NALL, ROBERT P.—Dr. R. P. Nall of Armored, died December 21, 1926. Aged 56. Cancer of the stomach was the cause of his death. Dr. Nall had practiced medicine in Mississippi County for twenty years. He is survived by his wife, one sister, Mrs. Laura Godby, Miami, Florida, and one brother, Dr. Ed. Nall, New York City. The body was sent to Halls, Tenn., for interment.

In the death of Dr. Nall, the wife has lost a loving companion, the community a faithful servant and the medical profession a useful and competent member. He was a graduate of the Memphis Hospital College of Medicine, Class of '92.

Editorial Clippings

MEDICINE AND THE SOUL

The clever young men who manufacture and who reflect the news of the day in the public prints are ever seeking new pastries with which to tantalize the palates of a sensation-jaded public. Not long since a leading surgeon, perhaps forced to weariness by the constant demands of these persistent journalists, let fall a few perfunctory remarks relative to the soul. What they were matters little if at all. Certainly he had nothing new to contribute to the dialectics of five thousand years on this subject. But the astute youths of the press were immediately like a pack in full cry on a new scent. A surgeon had spoken of the surgical search for the soul; let us see what other medicos might have to say relative to this morsel! A physiologist located the soul in the electric potential of the cells; an oto-laryngologist maundered uncomprehendingly about the glands; an orthopedist located the soul in the heart; even a urologist talked learnedly of "electric ions" instead of the anatomy with which he is presumably most familiar. And the end of this piffle is not yet! For fifteen hundred years scientific medicine languished in obscurity while the theologians of the middle ages fought battles of words on the seat of the soul within the human body. Apparently some, at least, of our modern colleagues are willing to revert to that epoch. There are however, other aspects of the situation with a more serious side. What respect can either the press or the public have for the scientific attainments of those who will lend themselves to such preposterous publicity? What credence can they be expected to give to scientific fact when it is accompanied with hopeless drivel? Even the moronic readers of the press that developed this series of interviews know better than to take these by-products of newspaper activities seriously. The harm that is done is worked on the serious and legitimate efforts that are being made to give to the public through the press the established facts of medical science. —*Jour. A. M. A.*, January 1, 1927.

TREATMENT OF CONTRACTURES AT KNEES

John Prentiss Lord, Omaha (*Journal A. M. A.*, January 1, 1927), depicts and describes a brace he has devised for the treatment of the contractures at the knee resulting from in-

faulile paralysis and arthritis. This appliance has been found to be sufficiently stable to eliminate the necessity for the use of plaster, which is desirable for reasons previously given. It has the ability to force the tibia forward in an effective manner, as well as to straighten the leg. It is not so cumbersome, but that it may be conveniently worn during most of the treatment; it is removable, and does not interfere with walking.

REPORT OF THE HOUSE COMMITTEE OF THE PHYSICIANS' HOME

Caneadea, N. Y., for the Year 1926.

At the Annual Meeting of the Physicians' Home, Inc., the House Committee made the following report, which gives in detail the progress of improvements made during the year 1926 at the Caneadea Unit:

1. The enlargement of the Home by the addition of a new and modern Sanitary Kitchen combined with Refrigerator Room and Cold Storage Room.

2. Complete bathroom with shower for use of help.

3. A new dining room with elevator service from the kitchen.

4. The establishment and equipment of a physician's office for the physician, who is in attendance to the guests at the home.

5. The erection of a cottage for the physicians' home farmer.

6. The erection of a physicians' home sign of concrete, iron and copper.

7. The erection of a two-car garage and work-shop.

8. The application of stucco to the entire home building.

9. A small start was made in the work of landscaping the grounds, many shrubs and 75 butternut, 25 hickory and 10 pecan trees were added to the nut grove started two years ago.

10. On grounds east of home we have added for recreation and exercise one official croquet court, two official quoit courts, and one archery court with small house attached to hold equipment of archery, mallets, balls, quoits and accessories.

11. The electric line extension from the main line at Caneadea to the home is under construction. At this date, the poles have been erected over the first one-half mile of the way.

The improvements as enumerated and completed in this report are paid in full. During

this year we feel that we have made better progress, had better organization and given better service than any previous year. We wish to take this opportunity to thank our board for the co-operation given and we have good hopes for an organization of increasing strength and harmony, which in 1927 will bring us the financial success needed for our progress.

Respectfully,

William H. Dieffenbach, M. D.,

Ralph Waldo, M. D.,

Stephen V. Mountain, M. D.,

House Committee.

THE WORK OF THE UNITED STATES PUBLIC HEALTH SERVICE AS RE- VIEWED IN THE ANNUAL RE- PORT OF THE SURGEON GENERAL

The annual report of the Surgeon General of the United States Public Health Service for the fiscal year ended June 30, 1926, has been transmitted to Congress by the Secretary of the Treasury. The report gives the record of the one hundred and twenty-eighth year of the existence of the service.

In part the Surgeon General says that the responsibilities of health officers, Federal, State and local are increasing; but our knowledge of disease and the methods by which it can be prevented are also increasing. We now know the methods by which many of the more important communicable diseases are transmitted, and this knowledge enables the health officer to take action to prevent the introduction or spread of these diseases. Some diseases, smallpox and diphtheria, for instance could be practically eliminated if the public could be made to realize the advantages of using well-known methods of prevention. Thousands of persons in the United States suffer and die every year because of lack of available information or indifference which prevents the use of methods of prevention, the efficacy and safety of which have been proven. Even when the results are reckoned only in dollars, properly directed health work pays large dividends to the community.

In making studies of child health, the Public Health Service has followed the same group of children through several years, making possible an estimate of the effects produced by such factors as underweight, visual, dental,

tonsillar, and other physical defects upon the health, progress, and welfare of the children, and also showing the effects in later years of the correction of these defects. This unique study is now beginning to bear fruit as the analysis of various groups of data and their preparation for publication progresses.

The regulation of interstate traffic in biologic products, while a routine and continued activity of the service, was not without features of public interest. Largely during the past year it has been possible to standardize products used in the prophylaxis and treatment of scarlet fever to an extent warranting their application through commercial manufacture. The earlier results indicate a decided benefit from the use of the antitoxic serum in treatment, but more limited usefulness for the immunizing injections. During the year the standardization of anti-dysenteric serum was completed and a potency unit suggested for comparative purposes, in the testing of commercial antidysenteric serums. This testing of all serums is done at the Service Hygienic Laboratory.

Considerable progress has been made in the studies of the various aspects of industrial hygiene and sanitation. The problem of the dangers to health possibly inherent in the use of tetraethyl lead gasoline has received during the year, virtual solution. By an intensive devotion of personnel to various phases of the problem, sufficient dependable data were secured to indicate that under certain practicable conditions of production, handling and use, this substance would not present any considerable health hazard. Practicable suggestions for these processes were drawn up, submitted to health organizations as a basis for regulation, and adopted in good faith by the manufacturing and handling interests.

A new departure on the part of the Public Health Service in the control of malaria was the employment of airplanes for the distribution of arsenical dust for the destruction of mosquitoes. These experiments give promise of success in adopted areas, and data are being collected as to precise methods and costs.

The field studies of goiter, a disease distressingly prevalent in some parts of the country, have been continued, with the result of stimulating the interest of health officials, furnishing them with precise methods of survey, and making available the best formation of the time regarding control.

One hundred cities have adopted the tentative standard milk ordinance developed by the public health service. In actual operation this ordinance has proved to be capable of enforcement, has measurably improved the sanitary quality of the milk, and at the same time the amount of milk used has increased.

Campaigns for the eradication of bubonic plague in rodents were successfully completed at New Orleans, Louisiana, and at Oakland, California as was the campaign against human and rodent plague at Los Angeles, California.

The Surgeon General states that 84 per cent of our rural population is as yet unprovided with adequate official local health service, the lack of which causes loss of human life and earnings estimated at approximately one billion dollars each year. During the past year work to establish full-time county health service was carried out in 89 counties in 20 States.

Measures for insuring safe drinking water supplies on interstate carriers, both trains and vessels, are meeting with better results each year due to the increasing appreciation of the value of this work on the part of the companies concerned. The railroads have practically completed the installation of the new type of water coolers for passenger cars which completely separate the ice and the drinking water.

Assistance was rendered the National Park Service in the designing and installation of sanitary equipment in the national parks and in maintaining proper sanitary conditions in the numerous camps, hotels, dining rooms, and kitchens. The vast and increasing number of sightseers and tourists who come to the national parks from every part of the United States and journey thence to many places makes sanitation imperative as a measure for the prevention of the interstate spread of disease.

In general, the report of the Surgeon General shows favorable health conditions throughout the United States. Preliminary reports indicate a low death rate for the calendar year 1925 (11.7 per thousand population in 30 States). A widespread out-break of respiratory diseases early in the year 1926 was largely responsible for high death rates for the country as a whole during the first four months of the year.

The death rate from tuberculosis in 36 States in 1925 was 81.8 per hundred thousand population. In 1924 in the same States the

rate was 84.8. This reduction is a continuation of the general trend of this disease for at least a quarter of a century. If the tuberculosis death rate of 1900 (201.9 per hundred thousand) had prevailed in these 36 States during 1925, there would have been 189,000 deaths from this disease, instead of 76,605 deaths, indicating a saving of more than 112,000 lives.

Typhoid fever showed some reaction during 1925, from the improvement which has been noted for several decades. Thirty-five States reported 36,000 cases of typhoid fever during 1925 and 27,000 cases during 1924. The increase was most marked in the rural population and small cities. The cities having 100,000 population or more showed a very slight aggregate increase over 1924. These large cities usually have better control over food, water, and milk supplies and better sewerage systems than the smaller places.

The program of venereal disease control which has been built up in the eight years since the creation of the Division of Venereal Diseases has been found, on the whole, satisfactory. This Division co-operates with State Boards of Health for the prevention and control of venereal diseases and for the study and investigation of conditions influencing the spread of these diseases. Throughout the country there has been built up a unified method of prevention and control. The work done at 416 Venereal Clinics, operated by local authorities, was reported regularly to the service. At these clinics scientific treatment is given to indigent patients without cost or for a nominal fee. Educational pamphlets, motion-picture films, stereopticon slides, and exhibits have been made available through each of the State boards of health. Standard laws and ordinances have been enacted throughout the country tending to unify the program of control. A review of the field to be covered and the work that has been done indicates an outstanding achievement in modern public health effort.

A very important part of the work of the Public Health Service is done in co-operation with other agencies, International, Federal, State and local. Many of the departments of the Federal Government secure the services of trained medical workers and medical and

sanitary advisers through the service. Information regarding the prevalence of preventable diseases is furnished to the Health Section of the League of Nations, and the League's information of the world prevalence of preventable diseases is made available to the service. The State Health Officers may call upon the Public Health Service for advice or assistance, and it co-operates in many ways with health officers throughout the country.

Book Reviews

History Taking and Recording.—By James A. Corseaden, M. D., Associate in Obstetrics and Gynecology, Columbia University, New York. Published by Paul B. Hoeber, Inc., New York, 1926. Price, \$1.50.

This handbook offers general suggestions for eliciting and recording history taking. It gives a complete list of those items to be obtained from the patient, which serve as a basis for making a diagnosis and managing an illness.

Cannula Implants, with Review of Implantation Technics in Esthetic Surgery.—By Charles Conrad Miller, M. D. Published by the Oak Press, 358 W. Madison St., Chicago, 1926. Price, \$2.00.

In this book the author describes a method of implantation with the aid of cannulae. Various methods of implantation and the use of a great variety of materials in esthetic surgery are reviewed.

The Normal Child, and How to Keep it Normal in Mind and Morals.—By B. Sachs, M. D. One hundred and ten illustrations, including three full page plates (one in colors). Published by Paul B. Hoeber, Inc., 76 Fifth Avenue, New York. Price, \$1.50.

Every chapter in this book is noteworthy for its common sense insight into the mind and heart of the normal child.

The Surgical Treatment of Goiter.—By Willard Bartlett. A. B., A. M., M. D., D. Sc., F. A. C. S., St. Louis, with foreword by Dr. Charles H. Mayo, Rochester, Minn. 130 original illustrations. Published by the C. V. Mosby Company, St. Louis, 1926. Price, \$8.50.

In presenting this book Dr. Bartlett hopes that it may appeal to the well-trained young general surgeon who is inclined to broaden his experience in the special field of thyroid surgery. It gives the details of the elaborate procedure involved today in the preparation, operation, and after-care of the goiter patient.

As a General Antiseptic

in place of

TINCTURE OF IODINE

Try

Mercurochrome-220 Soluble

(Dibrom-oxymercuri-fluorescein)

2% Solution

It stains, it penetrates,
and it furnishes a de-
posit of the germicidal
agent in the desired
field.

It does not burn, irri-
tate or injure tissue in
any way.

Hynson, Westcott & Dunning

Baltimore, Maryland

ST. JOHN'S HOSPITAL

Fort Smith, Arkansas



Conducted by

HOLT CLINIC

DR. CHAS. S. HOLT

Chief of Staff

Dr. L. Gardner

Dr. H. C. Dorsey

Dr. J. E. Little

Dr. J. H. Harvey

Dr. C. B. Billingsley

Dr. R. O. Bruton

RADIUM

Sufficient for All Treatment

Long Distance Phone

Fort Smith 1581

A HAVEN OF REST *For Mild, Mental Nervous Cases*



Main Building of the New Fenwick Sanitarium

The buildings are new; of pressed brick and concrete; steam heated, fire protection, and modern conveniences. They are built and equipped for the treatment and care of mild Mental and Nervous diseases and Drug and Liquor Addicts. Each case is individual and given personal care and attention. A quiet and refined atmosphere pervades this institution. A trained staff of physicians, all members of the American Medical Association. We are only two hours by rail from New Orleans, in the center of the Ozone Belt.

Over 30 Years of Successful Operation.

THE NEW FENWICK SANITARIUM, COVINGTON, LOUISIANA

THE JOURNAL

OF THE Arkansas Medical Society

PUBLISHED MONTHLY UNDER THE DIRECTION OF THE COUNCIL

Vol. XXIII

LITTLE ROCK, ARK., FEBRUARY, 1927

No. 9

Original Articles

PRINCIPLES AND PRACTICE OF ORTHOPEDIC SURGERY*

F. WALTER CARRUTHERS, M. D. F. A. C. S.
Little Rock

It has occurred to me in my daily contact with orthopedic problems that this very important subject should be very forcefully brought to the attention of the physician and surgeon. The principles and practice of orthopedic surgery are growing by leaps and bounds; but its application is too greatly neglected.

The orthopedic surgeon in days gone by was looked upon as merely a foot specialist or rather a corn doctor; but with the advent of the World War, and the great industrial and reconstructive period following it, has brought orthopedies into a very scientific high-class surgical art. It now embraces two great subdivisions, namely: operative and manipulative surgery.

Stindler says: "There is no room in operative orthopedic surgery for any method unless it be applied with the strict understanding that it shall constitute merely an incident in the treatment. Sometimes this incident is most important and sometimes it is a comparatively unimportant item in the treatment." Furthermore, in the application of orthopedic surgery whether operative or manipulative, one must have but one aim in mind, that of a return to as normal a function as possible. For the operative surgery, as well as for the manipulative surgery, the same principle holds true, that all deformities call for a scientific correction. One or the other being supplemental to each other; but the correction must always be timely and complete.

The field of bone and joint surgery is no

longer in doubt. The orthopedic surgeon of today, on account of his special training, should be in better position to advise and treat the conditions that come within this field.

I believe that the advancement in orthopedic surgery in the past ten years has not been excelled in any other branch of surgical science. Surgery is a fine art, but the successful application of the principles and practice of orthopedic surgery is a finer art. Furthermore, I firmly believe that if there is to be any advancement in this finer art of surgery, it will be along the lines of a thorough and more scientific handling of the problems that naturally are encountered in this specialty.

The operative act referred to in the beginning is merely an incident in the treatment of deformities or disabilities. It may be the most important single step in the entire procedure of treatment; but it is impossible to conceive of satisfactory results without the fullest consideration of post-operative care.

Too often the "cart is placed before the horse." Especially is this true in the treatment of club feet, either the congenital club foot or the paralytic type. The patient or the physician sometimes feels that simply an application of a brace is all that is necessary. This is true, but not until the first great step has been accomplished—that of correction of the deformity. This, I stated must be timely and correctly; then the post-operative care, such as bracing, physiotherapy, massage and the proper post-operative care, is in order.

The immobilization period following the initial correction of the deformity, whether operative or not, depends entirely upon the type of the deformity and the degree of the operation necessary to accomplish the correction.

In performing the stabilizing operation on joints, the period of immobilization depends largely upon the joint involved, but for sake of brevity it usually requires three to six months. In the tubercular joint, on account of its notoriously slow fusing ability, it gen-

*Read before the Fifty-First Annual Meeting of the Arkansas Medical Society, Hot Springs, May 18-20, 1926.

erally requires one year and in some cases like the spine, two or more years. In the joints requiring a true reconstruction like that required in arthroplasty, the time varies, because the tissue must not be irritated by any motion until the post-operative hyperemia has subsided. This is usually about ten or twelve days, when actual motion is begun, and to this massage is added after a few weeks. Passive motion plays a very small role, and is often the cause for more harm by forcibly breaking up the adhesions in the joint. In the surgical treatment of joints, one of the most important points is the differentiation between what is physiologically sound and what is physiologically unsound. Here alone competent surgical judgment is called into play, and the success or failure of the operation will rest with what procedure is carried out.

I know of no orthopedic condition following the question of reconstruction of joints that requires a more careful and scientific consideration than the proper handling of fractures. In spite of the vast experience, surgeons have had with fractures in the past ten or fifteen years, the results are really far from satisfactory. Much work has been done to formulate a more or less standard treatment, but in reality little progress has been made. However, there are some pretty safe standards now established in certain fractures, for instance, the treatment of fractured hips, the two methods most generally used is traction in connection with the Balkin frame. The Hodgins and Thomas splints and the well-known Whitman's abduction method with plaster of paris. Both have their advantages and disadvantages, because a poorly applied plaster cast in the hands of the inexperienced surgeon is worse than no treatment at all.

In the present day speed-mad civilization with its fast moving trains, the speedy automobiles and rapid flying airplanes is a constant cause for the production of severe and complicated fractures. More severe compound fractures with mangled limbs have been seen by surgeons treating fractures in the past six or eight years than all previous years combined. It, therefore behooves us to know the very best procedure possible in handling these difficult problems.

TREATMENT OF COMPOUND COMMUNUTED FRACTURES

In the treatment of compound fractures, four outstanding factors must be held in mind constantly:

1. What is the condition of the soft parts?
2. What are the possibilities of infection?
3. What is the condition of the blood supply?
4. Shock.

Treat your shock first and you have handled your patient.

Next, what is the condition of the soft parts and the blood supply? If it is a badly torn and lacerated limb, the treatment is for a mangled limb and not a fracture.

All of this must first be handled conservatively and then the osseous structure can very advantageously begin. Herein the method of T. Turner Thomas of Philadelphia, cannot, in my humble opinion, be improved upon. It is as follows: "The surgeon is gowned, masked and gloved as though for a major operation. The limb, which has previously been shaven, is thoroughly cleansed with ether on a sterile sponge held with sponge holder. The parts are draped with sterile sheets and towels, and the skin and wound painted with a 7.5 per cent tincture of iodine, followed by alcohol. With a small sponge on a hemostat, ether and tincture of iodine are carried to all parts of the wound and the excess of iodine removed with alcohol. The protruding ends of the bones are also thoroughly cleansed with iodine, alcohol and ether, and then with gentle traction and manipulation, the protruding ends are replaced and the oozing is allowed to escape freely."

Following this, I prefer to widen the incision in cases where the opening at the point of bone protrusion is not wide enough for reduction without severe and troublesome manipulation. This is done by use of scissors to a point where the bone can easily be reduced. These wounds are all closed by very light stitching, allowing enough space between them to permit the serum of the wound to escape freely. The limb is then immobilized securely in a modern extension splint and the patient placed at absolute rest with sufficient opiates and sedatives to keep him quiet, where he is allowed to remain about one week. After that time, x-ray is made to determine the condition of the osseous structure.

If this outline is conservatively carried out with the least immediate operative intervention on the fractured bones themselves, it is my firm conviction that there will be less likelihood of any infection and the percentage of cures and complete functional results will be much higher.

As a class there are no simple fractures. One must ever hold in his mind a profound responsibility when a fracture case comes to him. The simplest to the most complicated ones always taxes the surgeon's ability to the uttermost in order to give to his patient a return of perfect apposition and ultimately a perfect function.

This brings us to the question of non-unions—their causes and treatment.

Non-Union in fractures is on the increase. Whether this is due to the increase in the number of fractures, we are unable to tell.

Ununited fractures may be defined as bones in which union has failed to occur, after a certain period. It may be delayed union or a true non-union. A delayed union is one in which the clinical findings, as well as the x-ray, fails to show a sufficient amount of callous to maintain its normal continuity. In many instances it is difficult to determine why this condition has occurred; but as a rule, if sufficient time is given, these delayed unions will become a satisfactorily united bone.

In the true non-union, many factors are looked upon as the etiological causes. The outstanding points are given in the literature reported by Henderson in a recent article in the Journal American Medical Association.

(1) Severe injuries associated with compound fractures. (2) Severe injuries associated with the so-called simple fractures. (3) Inadequate fixation. (4) Poor reduction along with malposition and interposition of muscles. (5) Metal plates, perhaps improperly applied. (6) Undetermined.

It is interesting to note that of the twenty-five cases which I have treated for non-union in the past year, 70 per cent have been associated with severe injuries. 10 per cent have been caused by interposition of muscles and in one case the cause was undetermined, and the remainder of the twenty-five cases were due to improper reduction and malposition.

The above statistics are on cases involving the shaft of the bone and not joint cases. In a series of five fractured hip cases, which came to me for non-union, the outstanding

cause seems to be due to the lack of sufficient treatment.

From my personal experience, I do not feel that general or constitutional causes play any part as to the etiology for non-union or delayed union.

TREATMENT

In all these cases with the exception of two, the in-lay autogenous graft was used with absolute perfect results. Barring exceptional cases, autogenous bone grafts are without doubt the rational means of treating non-unions.

The question of endocrine therapy is in much dispute; but I feel that it is quite important in the after-treatment to stimulate the general condition of bone by all means at hand, such as sunlight, ultra-violet rays, medication of phosphorus-calcium and lime salts; but as to the specific effect of glandular therapy in general, I doubt very much, altho I use it routinely, and feel from the experimental work we have followed out by its use that it is worth while.

BIBLIOGRAPHY

- (1) Stindler—Operative Orthopedics, 1925.
- (2) Henderson,—Ununited Fractures, J. A. M. A., January 9, 1926.
- (3) Eve, Duncan—Ununited Fractures, So. Medical Journal, November, 1925.
- (4) Speed, Kellogg—American Surgical, 1920.
- (5) Campbell—Treatment of Fractured Femurs, J. A. M. A., January, 1924.
- (6) Orr, H. W.—Journal Orthopedic Surgery, 1920.

DISCUSSION

DR. L. KIRBY, Harrison: I don't know whether I got the exact gist of this paper or not; but I know it was intended to tell the truth. I like a man to tell the truth every time and everywhere. You cannot expect perfect results in fractures of any nature, even in the hands of the most experienced and best surgeons, under all conditions. I don't know whether I stated it just exactly right or not, but it is the truth, and I would like for this Society to say that we agree with him on that part of it. The rest of it is so good we will agree with all of that.

DR. A. G. HARRISON, Searcy: I hesitate to discuss this paper in the presence of Dr. Carruthers and especially Dr. Albee; but in view of the fact that they condemn "hardware surgery" so much, I feel that I would be a coward if I didn't say something in behalf of it. If it were possible for us to send all of our patients to such men as Dr. Carruthers and Dr. Albee, the autogenous bone-graft would probably be the preferable method; but lots of patients are not able to go to Dr. Carruthers or Dr. Albee, or any other man who is prepared to do that bone-graft surgery. I could never make enough money to buy one of those saws. But I just want to state that in the

last three or four years I have done 23 bone plates with metallic plate, and all of them have been absolutely successful. I had to remove two only of those plates. All of them function properly. If you cannot do any better I would recommend putting in some hardware.

DR. CARRUTHERS, in response: Replying to my good friend, Dr. Harrison, from Searcy, I wish to make it clear to the doctor that he should not get reconstruction surgery mixed up with the treatment of non-union in fractures. It certainly is out of the question to try to do reconstruction surgery by the use of iron-plates; and, furthermore, it goes without saying that "hardware surgery" is by no means indicated for the treatment of non-union in fractures. I see no good reason why he should undertake to do this type of work when it is like he says "That owing to the general condition surrounding these cases, they are not prepared to do it in the way it should be done." He should by all means see that these cases are sent to a proper place where they can be handled scientifically.

In regard to Dr. Kirby's question, I tried to make it plain that I do feel that there are no simple fractures; but that every one of them is hard and difficult to handle, even in the hands of an experienced surgeon. I am becoming convinced more and more every day that there are no simple fractures, and that a surgeon is up against a hard row of stumps whenever he has any type of fracture to handle in order to get a satisfactory perfect apposition with perfect functionable results.

It is a well known fact that even in the hands of an experienced surgeon, fractures are very difficult and tax the surgeons' ability to the limit.

ATYPICAL PNEUMONIA*

W. M. MAJORS, M. D., Lafe

In my endeavor to present this subject before this honorable body on this occasion, I do so full mindful of the fact that the subject pneumonia has been very frequently discussed before our various medical societies to the extent, that there remains but a small margin on which to write without a repetition of what has been said or written many times in the past.

Recent medical statistics show that in civilized countries, acute pneumonia is responsible for over a million deaths every year. In the United States alone, in 1923, this disease was responsible for over 105,000 deaths, and this mortality is strikingly uniform from year to year, and from decade to decade. An analysis of death rates from general hospitals in England, France, Germany, Switzerland and the United States shows an average case mortality of from 25 to 35 per cent. With the above statistics in mind, I feel that the im-

portance of my brief paper on this subject is warranted. Typical textbook pneumonia is too well understood by the average physician to justify my consuming your most valuable time in its discussion on this occasion. For this reason and for the sake of brevity, I desire to call your attention almost entirely to a discussion of a few of the very frequent atypical manifestations that we see in connection with this much dreaded disease.

In this connection, I desire to say that in my opinion, numerous cases of atypical pneumonia come under our care, terminating either in death or recovery, without our being able to detect the existence of the disease. To some this statement may appear a bit far-fetched, but in my opinion, it carries a large measure of truth with it.

THE ONSET—At times this disease is ushered in by nausea, vomiting and diarrhea instead of the characteristic chill that we most generally see in typical attacks of pneumonia. Also, there may be present opisthotonos contracted or dilated pupil, irregular pulse, retracted abdomen, cervical retraction, and, in fact, symptoms almost typical of meningitis. These symptoms are especially true in children.

Pneumonia occurring in chronic alcoholics may at first glance be quite unsuspected, the symptom group being that of delirium tremens. In a large portion of the cases of atypical pneumonia there is an absence of pain, cough, sputum, and with but little disturbance of the pulse or temperature. In children, there may be present violent abdominal pain with constipation and other symptoms simulating intestinal obstruction; or there may be vomiting, abdominal tenderness, marked tympanites, rigidity of the abdominal muscles, symptoms identical of peritonitis.

THE PAIN—It is not necessarily felt over the region of the affected lung, and as I have just said, it may be entirely absent throughout the attack, and when present, it may be referred to the ilium, the epigastrium or to any region to which the intercostal nerves are distributed. There are one or more cases on record in which the pain was referred to the appendiceal region and an appendectomy was performed, removing a perfectly normal appendix from a patient whose real and only trouble was an attack of atypical pneumonia.

A very large per cent of children suffering from an attack of pneumonia complain of the

*Read at the 51st Annual Meeting of the Arkansas Medical Society, Hot Springs, May 18-20, 1926.

pain being in the abdomen, and not in the region of the affected lung. These same symptoms have been known to occur in adults; however, this is a rare happening. Pain in the chest in typical pneumonias, is one of the most constant symptoms, some observers have noticed its presence in as high as ninety per cent of the cases. The pain may be the first symptom noticed, in some cases it precedes the chill. On the other hand, it may not make itself manifest until the advent of the third or fourth day of the disease. In some cases of pneumonia the pain may entirely disappear at the end of the first day or so, not to return during the attack. As above stated, it is possible to have pneumonia with an absence of pain. This occurs in central and atypical pneumonias.

Neither is pain much in evidence in senile or asthenic pneumonias, and very frequently children who are old enough to express themselves have an attack of pneumonia complaining of but slight or no pain at all. In delirious patients pain is not complained of at all; this, however, may be due to their unconscious condition.

As a rule the pain corresponds to the site of consolidation, but not infrequently it is referred to the region of the nipple on the affected side, and rarely, the pain may be complained of on the unaffected side. The majority of cases in which there is an absence of pain are those cases that have no pleura involvement, as in pneumonia, affecting the center of the lung. Those cases of pneumonia in which there is a severe abdominal pain, are those cases in which the diaphragmatic pleura is involved. Most important to bear in mind is the fact that the pain produced by pneumonia may be referred to the abdomen and thus simulate appendicitis or some other abdominal lesion, and failure to recognize the true source of the pain has, in not a few instances, led to the performance of a needless laparotomy.

PHYSICAL SIGNS—The physical signs indicative of a typical attack of pneumonia are usually present in from twenty-four to forty-eight hours, and if delayed beyond this period is usually due to the fact that the pneumonia started in the central portion of the lung and gradually traveled toward the periphery. In some cases the lesion does not extend beyond the central portion of the lung, and here the

physical signs may be absent throughout the entire course of the disease.

THE SPUTUM—Inasmuch as there are some variations in the character of the sputum in different cases of pneumonia, I think it not out of place to call your attention to a few of the commoner variations. In typical cases of pneumonia, the first day or two we see a white frothy sputum which may be streaked with traces of blood. In the course of a few hours, however, it assumes the characteristic brick-dust appearance. This character of sputum may be regarded as pathognomonic of pneumonia. It is also of a very thick and tenacious character. Instead of the above mentioned character it may be of a thin and watery appearance, and may fail to show even slight traces of blood throughout the attack. The sputum may be entirely absent. This is most generally seen in children and in delirious patients who fail to cough it up, so to speak. While the expectoration of pure blood may occur during an attack of pneumonia; the occurrence of a frank hemoptysis should arouse one's suspicion of the possibility of the existence of a tuberculous rather than pneumococcus infection.

THE CRISIS—The phenomena which characterize the crisis or termination of an attack of pneumonia constitute the most remarkable feature of this or any other disease. It certainly brings about a very abrupt and decided change, and is thought to be due to the establishment of an active immunity to the toxins of the pneumococcus. The appearance of the crisis is expected or looked for on about the seventh day; but in atypical cases, such as I am now discussing, it may not make its appearance until as late as the twenty-sixth day, or it may come as early as the second or third day.

THE TEMPERATURE—The temperature in typical cases of pneumonia has an average range of from 103 to 105 degrees F., but in atypical cases there may be an absence of any rise of temperature. A temperature of 100 degrees or less may be observed at times in the aged pneumonia patient or there may be an absence of even the slightest rise of temperature during the attack of such cases. As a rule, those cases showing but a slight rise in temperature have a fatal termination.

In conclusion, I desire to reiterate that it is possible to have an attack of pneumonia without the initial chill, without any distur-

balance of temperature, without any or very slight disturbance of the pulse, without any or very slight disturbance of respiration, without any or very little pain, and in cases where there is a gaseous distension of the stomach and intestines we may get a tympanitic note while percussing over a lung in which there is an area of consolidation. We should also bear in mind the fact that there are two regions in which pneumonia may exist without our being able to detect its presence. They are at the apex of the lung in that part covered by the shoulder, and along the posterior border of the spine, where it is in close proximity to the spinal column. In either of the above locations, pneumonia may run its entire course without our being able to detect it.

DISCUSSION

DR. H. D. WOOD, Fayetteville: Possibly I may be the one who has had the most recent case of pneumonia of any one present. I am certainly glad to have heard this paper. I think there is no other disease that produces so many deaths as pneumonia. These cases of atypical pneumonia are some of the things we need to know more about.

Two or three years ago I saw a case that was out of the ordinary; so much so that I looked up the matter and found that it should be classed as pneumoconiosis. Now, pneumonia may not have entered into that case bacterially. It was quite new to me, and I must say to you that this case was so new to me, and the crisis was so long drawn out and all that, that I investigated the case a little more thoroughly and I concluded that it was a case of pneumoconiosis, or a case of dust pneumonia. This man had worked in a rock crusher where there was a great deal of dust. I passed his place frequently and I often wondered how he could stand to breathe the dust that was coming from that machine. So that dust pneumonia belongs to that class of pneumoconiosis. That man now has a very feeble respiratory murmur in that lung.

I cannot make out any expansion of his chest on that side; but there is an exaggerated expansion on the other side. That is one of the atypical cases of pneumonia, it strikes me. (Applause).

DR. MAJORS in response: In closing my paper I wish to mention two other manifestations that we occasionally see in pneumonia. First, Massive Pneumonia.—This is a rare form in which the large bronchi become entirely filled with the croupous exudate. Owing to the blocking of the bronchi the physical signs may be limited to a marked flatness on percussion such as occur in pleurisy with effusion. Second, we occasionally see a very marked icterus accompanying, or associated with an attack of pneumonia. This is a rare manifestation, but no doubt you have seen it.

Abstracts

TREATMENT OF ACUTE GONORRHEA WITH ANTISEPTICS IN GELATIN

Neutral aeriflavine in gelatin was used by Russell D. Herrold and Harry Culver, Chicago (Journal A. M. A., Feb. 12, 1927), with good results. Gelatin alone does not inhibit the growth of the gonococcus on artificial mediums, but the neutral aeriflavine in 10 per cent gelatin kills the gonococcus in dilution of 1:4,000. There is probably some hydroscopic action by the gelatin, since it tends to take up moisture when not saturated, as it is a protective colloid. The results seem to indicate that there are fewer follicular infections than with aqueous solutions. The thick sticky solution remains in the urethra for a longer period after treatment than aqueous solutions. Finally, it is an emulsoid colloid or protector, and has all the added advantages peculiar to colloids in treatment of infections of the mucous membrane. It is possible to use the gelatin mixture for other than office treatments when small quantities of gelatin are used, such as 1 per cent, as it does not coagulate at the lower temperature and may be combined with neutral aeriflavine in higher dilution of this drug, or with strong silver protein and many other antiseptics. One of the most striking results noted was the low percentage of cases complicated by posterior infection. There were only eighteen, or 16.5 per cent, posterior infections out of the 109 selected for this method of treatment. The cases selected were, as nearly as could be determined, recent infections and not acute exacerbations of chronic infections. Only a few patients had a discharge of longer than four days on the initial examination. There was a larger proportion of posterior complications among those who had a discharge for several days before treatment than with a discharge of short duration. The average duration of the discharge before treatment in the cases in which ultimately there were complications was 5.4 days while the average duration of those which remained uncomplicated was 2.5 days. The average time until cure of the uncomplicated cases was 3.2 weeks, and the average time of cure of the patients with posterior complications was 8.4 weeks.

ARKANSAS PHYSICIANS!

If you have not paid your dues for 1927, won't you please attend to this now.

THE JOURNAL

OF THE

ARKANSAS MEDICAL SOCIETY

Owned by the Arkansas Medical Society and Published under the direction of the Council.

WILLIAM R. BATHURST, Editor
810-812 Boyle Building, Little Rock, Arkansas.

Published Monthly. Subscription \$3.00 per year; single copies 25 cents.

Entered as second-class matter, June 21, 1906, at the postoffice at Little Rock, Arkansas, under the Act of Congress of March 3, 1879.

Acceptance for mailing at special rate of postage provided for in Section 1103, Act of October 3, 1917, authorized August 1, 1918.

The advertising policy of this Journal is governed by the rules of the Council on Pharmacy and Chemistry of the American Medical Association.

All communications of this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the State. Notice of deaths, removals from the state, changes of location, etc., are requested.

OFFICERS OF THE ARKANSAS MEDICAL SOCIETY

J. M. LEMONS, President.....	Pine Bluff
HENRY THIBAUT, President-Elect.....	Scott
G. E. TARKINGTON, First Vice-President.....	Hot Springs
T. F. KITTRELL, Second Vice-President.....	Texarkana
J. H. FOWLER, Third Vice-President.....	Harrison
R. J. CALCOTE, Treasurer.....	Little Rock
WM. R. BATHURST, Secretary.....	Little Rock

COUNCILORS

First District—THAD COTHERN.....	Jonesboro
Second District—J. L. JONES.....	Searcy
Third District—M. C. JOHN.....	Stuttgart
Fourth District—W. T. LOWE.....	Pine Bluff
Fifth District—W. P. COOKSEY.....	Magnolia
Sixth District—B. C. MIDDLETON.....	Texarkana
Seventh District—DEWELL GANN, SR.....	Benton
Eighth District—ANDERSON WATKINS.....	Little Rock
Ninth District—SAM G. DANIEL.....	Marshall
Tenth District—THOMAS DOUGLASS.....	Ozark

COMMITTEES

SCIENTIFIC PROGRAM—R. J. Calcote, Little Rock, chairman; A. S. Buchanan, Prescott; R. H. T. Mann, Texarkana.

SCIENTIFIC EXHIBIT—C. E. Oates, Little Rock, Chairman; Homer Scott, Little Rock; D. E. White, El Dorado.

MEDICAL LEGISLATION—Earle H. Hunt, Clarksville, chairman; J. W. Walker, Fayetteville; Thad Cothern, Jonesboro.

STUDENT LOAN FUND—E. F. Ellis, Fayetteville, chairman; J. H. Lenow, Little Rock; Wm. R. Bathurst, Little Rock; G. A. Warren, Black Rock.

NECROLOGY—Cowley S. Pettus, Little Rock, Chairman; F. B. Kirby, Harrison; E. E. Barlow, Dermott.

HEALTH AND PUBLIC INSTRUCTION—C. W. Garrison, Little Rock, chairman; F. Michael Smith, Pine Bluff; M. E. McCaskill, Little Rock; President and Secretary of State Society.

CANCER CONTROL—Dewell Gann, Jr., Little Rock, chairman; John S. Jenkins, Pine Bluff; J. C. Hughes, Hoxie.

INFANT WELFARE—A. C. Kirby, Little Rock, chairman; N. D. McCormack, Ft. Smith; H. W. Browning, Little Rock.

HOSPITALS—J. D. Southard, Fort Smith, chairman; D. A. Rhinehart, Little Rock; J. T. Palmer, Pine Bluff.

Editorial

"All life journeying toward death and all death hastening back to life."—Ingersoll.

THE GRIM REAPER

Death was unusually busy in the year 1926 among the members of the Arkansas Medical Society, twenty-eight being on the mortuary list—more than double the number of the year before and several preceeding years. Yet the average age of the deceased made a better showing than the average for several years past. It is of some interest to note the comparisons, as follows:

1926, deaths, 28, average age, 61.
1925, deaths, 13, average age, 57.
1924, deaths, 13, average age, 51.
1923, deaths, 12, average age, 61.
1922, deaths, 13, average age, 55.

There seems to be no particualar cause for the doubling of the number of deaths over the average of the preceeding five years, but when it is noted that several of the deaths were members in the prime of life and usefulness, the average of 61 years demonstrates the fact that the majority lived out their allotted span of life, many being well over 70.

Concerning the fact that the society lost some members who, naturally, seemed to have been good for many more years of activity in their profession, yet who were thus cut off, it may be suggested that too many of our members take too little recreation. That all work and no play makes Jack a dull boy oft is quoted, but it is true, nevertheless. The capable physician owes it, not only to himself, but, to his patients and the community, to conserve his energies by not wearing himself out prematurely. The way to conserve one's energies is to mingle play with work, or rather to alternate play and work. There is an old maxim which prescribes eight hours for work, eight hours for sleep, and eight hours for rest and recreation. It is true that the physician cannot well apportion his work by hours. His hours of relaxation may be intruded upon by an urgent call and he must not neglect a patient for recreation. He may not be able to achieve eight hours continuous slumber—a call may come at any hour of the night as well as day. But he can, in a way, manage to equalize things and get his recreation.

We find business men of late years have become fully alive to this need of recreation. Some use up their luncheon hour or two hours by playing auction bridge or billiards at the club. Others get away some afternoon to the golf course or to a baseball game—any thing to relieve the monotony of his desk or sales-room. Business has come to recognize the value of play for their employees—hence the eight hour laws, the early closing movement, the Saturday afternoon holiday in many fields of labor and the annual vacations. In the last analysis, few employers grant vacations with pay purely as an act of benevolence, but for business reasons. They have learned that the worker yields better returns when given time for recreation. It re-creates, makes anew, renews his energy, inspires his ambition to greater effort, eliminates the feeling that he is a mere drudge and machine. The wealth of the commonwealth depends on the output of labor, no matter what kind of labor, and when the average years of life are curtailed by reason of too much work and too little play, the community is the loser in the long run. These economic facts are well understood and they apply to the physician as well as the laborer and business man. Thus he owes it to himself, to his family, and to his community to give the best he has for as long a period as possible. He cannot give of his best, nor can he give as many years unless he plays as well as works.

The physician has handicaps peculiar to his profession. Take the average business man and he can surround himself with a certain atmosphere of cheerfulness. He can tell jokes with his customers and clients, laughter frequently punctuates the details of actual business, yet without interrupting it. The caller is greeted with a smile and is given a genial welcome. How different is the daily routine of the physician; his callers and his patients are the afflicted ones. Their topic is their ailment or disease, their conversation runs to symptoms and pains. At the bedside of the patient are sorrowing, anxious relatives, there is an absence of that bon homie and fellowship, the jocular greetings, which are common to the average business man; hence it really is more important that the physician be lifted out of his daily routine than perhaps the most tired business man. Yet, the physician is the very man who neglects this important

duty of recreation by his relaxation and change.

In the Journal of the American Medical Association of December 4, is an editorial comment "on an article in the American Journal of Public Health for November, giving the results of the study of the deaths of physicians by Drs. Emerson and Hughes. "They found," says the comment, "that with minor exceptions the specific death rates among male white physicians from organic heart diseases, pneumonia and diabetes were decidedly higher than among the occupied males of the country as a whole. For chronic nephritis, typhoid, pulmonary tuberculosis, cancer and violence (except suicide) the reverse was true."

"With due allowance for some speculation it is probably true that there is less fatal tuberculosis among physicians as a group because they know more about its early symptoms and treatment and recognize it sooner than do men in other occupations."

It is also interesting to note that the comment "that a physician gives the best he has to that fellow-member of the profession whom he is privileged to attend during illness."

The editorial comment also gives some of the replies to letters sent out touching the causes of death of certain of the deceased. One says tersely, but doubtless truly, "Just worn out." Another says, "probably a heart attack or apoplexy." In both cases the chances are that overwork and too little play were really the responsible causes.

About a year ago there were editorials in this Journal on the necessity of the layman over 40 years old having himself carefully examined by a competent physician so that if any latent weakness or lurking, undeveloped disease were present, means could be taken to hold future trouble in check or remove it altogether. This was a movement sponsored by the American Medical Association and the Arkansas Medical Society co-operated to the extent of sending, free of charge, a pamphlet to our entire membership. It gives minute directions as to how such examinations should be conducted. Is it not true that we have been in the attitude of that morally weak preacher who said "Do as I say; not as I do?" Let us remind our members that what is good for their patients is good for themselves, and urge them to have themselves examined by some fellow practitioner. Also, begin now,

if you have not already done so, to make play as much a part of your routine as work. Get out in the country, play golf or tennis, go swimming in summer, join in a game of billiards, in winter go hunting or fishing, take a vacation, leaving your practice in the hands of a brother physician during your absence.

The editor writes this with feeling and even with a tear in the eye, having, himself, but recently recovered from a serious illness, which came close to cutting his activities off permanently, and which was followed by a later attack. And he came to a realization of the fact that he, like too many others, had been burning the candle at both ends, toiling persistently, day in and day out, not even resting on the seventh day, given to all the world as a day of rest.

My close touch with the physicians over the State, my personal knowledge of their unselfish labors, their devotion to duty, their long hours, their long suffering, their warm sympathies with the afflicted, their constant confronting with tales of woe over long periods of time without recess, must be my reason and apology (if any be needed) for this lengthy editorial. Remember that real duty consists not in working yourself to a premature death, but to keep yourself in physical and mental trim so that you may serve better and longer.

When you tell a harried business man that what he needs is to get away from work for a time and he replies that he cannot spare the time, your answer generally is to remind him that he had better be away from his business temporarily than permanently, as will be the case if he refuses to rest. When you tell that to the next patient, suppose you take an inventory of your own physical condition and see if you don't need a little of the same kind of remedy that you are prescribing.

COMMENTS ON PERIODIC HEALTH EXAMINATIONS

R. J. CALCOTE, M. D.

The Surgeon General of the Public Health Service estimates a total loss in this country of one billion dollars annually due to ill health. This is a per capita cost of ten dollars to the approximately one hundred million people living in the United States. This makes no mention or estimate of the untold suffering and misery, which is incalculable.

Much, very much, of this sickness and suffering is preventable and could be forestalled at a much less cost than one billion dollars annually. It is useless to detail some of the older, more familiar preventive measures which could be used more extensively. Vaccination against smallpox no longer needs to be championed by the medical profession. Antityphoid inoculations have gained the confidence of the public and are fast making inroads on typhoid statistics. Diphtheria toxin-antitoxin injections have gained the confidence of the profession and are fast winning their way into a lay demand. But there is a newer and a powerful instrument which has been advocated recently, and which has not received the whole-hearted organized support of the profession—but which, we dare say, is being readily accepted and demanded by the public. This instrument is periodic examination of the apparently healthy.

The periodic Health Examination is the ultimate in preventive medicine for many chronic diseases and conditions. The insidious cancer, tuberculosis, heart diseases and other less common conditions could be caught in their incipency. Clinicians tell us, for example that most cases of uterine cancer come to us too late to be cured, and that the symptoms which cause the patient to suspect something is wrong are often late symptoms. Then, how else are we to get these cancers at a time when we can do something for them than by examination at periodic intervals of women of the cancer age? One of the triumphs of modern medicine is the reduction of the death rate from tuberculosis. This reduction was much greater in the beginning of this campaign than at present and there is no measure which would again accelerate this reduction more than universal periodic health examinations. Diseases of the heart are given as the leading cause of death in most statistics, and many unsuspected diseased hearts are found by anyone making routine physical examinations. Results in this one great class of diseases alone would justify periodic health examinations.

First, let us convince ourselves of the great value of this measure, and let us ourselves take stock periodically of our health. Then let us convince our patients of its value and give to the public the great benefits of this measure and add another monument to the triumphs of modern medicine.

Editorial Clippings

PATHOLOGICAL CONDITIONS ARISING IN GOITERS DURING IODIN TREATMENT

Into the pathological laboratories of the goiter regions there is pouring now a steady stream of the product of thyroideetomy, and a very wonderful opportunity is being offered the pathologists for an intensive study of the pathology of this most interesting, and still mysterious, organ. The pathological opportunity is rendered the greater, because of the extraordinary therapeutic experiment now going on in the almost universal administration of iodine in certain regions of the country. The wide-spread propaganda for the use of iodine in goiter prevention has had the same effect that other psychologic stimuli of similar intensity have upon the average human mind, and there can be no doubt that we are seeing about us much misuse and over-use of this therapeutic procedure. Iodine is being administered without discrimination in many cases for any swelling or fancied enlargement of the neck, no matter what the nature of the condition may be—exophthalmic goiter, adenomatous goiter, simple colloid goiter, neoplasm, etc. While the iodine-treatment for goiter prevention campaign was aimed particularly at such prevention among children, particularly those of school age, a great many adults applying their usual reasoning processes to the situation have taken advantage of the movement to include themselves in a procedure which, if it has preventive possibilities in the one case, may also possess for them *curative*. The self-administration of iodine is an easy thing for an adult, and such instances of self-treatment are being frequently met with at the present time. Moreover, goiter cures containing iodine are everywhere obtainable, and are being sold everywhere by unscrupulous and ignorant agents. Goiter, as a popular catch-word, is sending great numbers of people, particularly in the goiter regions, but also to some extent all over the country, to their physicians, and the average practitioner finds himself in a position where he is practically forced to lend himself to the administration of iodine in adult cases in which there is an enlargement of the thyroid, the exact nature of which he is unable to de-

termine because of the vague and unsatisfactory symptomatology. Being convinced of the great value of the administration of iodine as a measure of prevention in the case of children, and having knowledge of the good results obtained by the pre-operative use of Lugol's in cases of exophthalmic goiter, his judgment is also influenced by the situation, and he succumbs to the temptation of trying out this treatment in those cases less clearly clinically defined, and as a result he proceeds to lugolize patients who unfortunately turn out to be cases of adenomatous goiter and not those of Graves' disease. And it is in this latter class that damage is especially being done. Adenomatous goiters are being sent into the diagnostic laboratories with a clinical history of Lugol's treatment extending over weeks and months before the final thyroideetomy. And in this especial class of pathological material many interesting phenomena are being revealed to the pathologist. The histological changes resulting from the normal pre-operative lugolization of a typical case of Graves' disease are wholly characteristic and very striking. The return to an apparently normal colloid state—albeit a thin and watery colloid; the extra-ordinary epithelial resolution from the hypertrophic and hyperplastic state to one apparently normal as far as histologic characters are concerned; these extra-ordinary changes in varying degrees of completeness characterize the results obtained by the pre-operative treatment of the exophthalmic goiter by means of Lugol's administration. Only one thing histologically remains to show that it is still a thyroid of a Graves' disease patient and not a simple colloid goiter, and that is the persistence of the hyperplastic lymphnodes throughout the gland tissue. They not only do not disappear, but in the majority of cases, they appear to be more prominent than in the unchanged hypertrophic goiter. Further, in the cases in which the iodine treatment of exophthalmic goiter has been prolonged before thyroideetomy, or has been unduly pushed, there appears to be an unusual degree of lymphoid hyperplasia, quite out of proportion to that found in the more successfully treated cases. In the case of the adenomatous goiter treated by Lugol's with unfortunate clinical results in the form of the so-called iodine hyperthyroidism the one striking thing in the specimens coming to this laboratory has been the marked hyperplasia of the

lymphoid tissue, and in some instances this has reached an extraordinary degree, the entire goiter being transformed into a mass of lymphnodes with large exhausted germ-centers. In a number of our cases the clinical history has been that of a gradual or more rapidly developing induration of the goiter, an "iron-hard" or "wooden" consistency, leading to the suspicion of malignancy. In some of these cases the histological picture has been identical with that of Riedel's struma. In this material there has been noted also marked changes in the tissue of the adenomas themselves, evidences of hypertrophy and proliferation of the adenoma epithelium. The question naturally arises as to whether iodine administration may stimulate growth in neoplasms of the thyroid. From material recently sent to this laboratory there is apparently some ground for suspecting that carcinomas of the thyroid are stimulated to a more rapid development under the influence of iodine administration.—*Annals of Clinical Medicine, Official Periodical, The American College of Physicians.*

Personal and News Items

The Northwest Arkansas Medical Meeting sponsored jointly by Washington and Benton County Medical Societies met at Rogers, January 27, 1927. The time of this meeting was so arranged that anyone planning to go to Tulsa for the American College of Surgeons Meeting, held there January 28 and 29, could attend this meeting and leave Rogers in time to get to Tulsa on the night of the 27. A number of Little Rock physicians were on the program.

Dr. F. W. Carruthers, Little Rock, delivered illustrated lecture on "Management of Fractures."

Dr. D. A. Rhinehart, Little Rock, delivered illustrated lecture on the significance of x-ray findings of the chest. Dr. Vinsonhaler of Little Rock read a paper on "Ocular Symptoms of Encephalitis;" Dr. W. D. Rose of Little Rock, read a paper on "Diagnosis and Treatment of Gall Bladder Disease." Dr. Dewell Gann, Jr. of Little Rock, read a paper on "Histo-pathology and Treatment of Cervicitis;" Dr. Fay H. Jones of Little Rock gave illustrated paper on "Diagnosis and Treatment of Stone in the Ureter."

Dr. Chas. R. Moon, formerly interne at State Hospital for Nervous Diseases, has opened an office in the Boyle Building.

At a recent meeting of the Arkansas County Medical Society, the following officers were elected for the present year: President, S. A. Drennen; Vice-President, C. A. Lumsden; Secretary and Treasurer, J. E. Neighbors; Delegate to the State Convention, Howard Dickens; Alternate, C. C. Parks.

WANTED—Salaried appointments for Class A physicians in all branches of the medical profession. Let us put you in touch with the best man for your opening. Our nation-wide connections enable us to give superior service. Aznoe's National Physicians' Exchange, 30 North Michigan, Chicago. Established 1896. Member the Chicago Association of Commerce.—(Adv.)

Secretary Means reported the election of the following officers for the Sebastian County Medical Society for the present year: President, J. S. Southard; Vice-President, S. P. Stubbs; Secretary, C. S. Means; Treasurer, W. R. Brooksher, Jr.; Member of Board of Censors, W. F. Rose.

Among the Arkansas physicians present at the recent meeting of the Tri-State Medical Society at Memphis, Tenn., February 2 and 3, were: P. W. Lutterloh, Altman; Pratt of Jonesboro; Wright of Russellville; Parr of Eudora; Barlow of Dermott; Foster and Eberle of Fort Smith; McCarroll of Walnut Ridge; Husbands, Usrey, Grimmer, Smith, Johnson, Wilson of Blytheville; Kitchens of Texarkana; Pettus, Hudson, Caldwell, Wilkes and Calcote of Little Rock and Owens of Armored.

The Sectional Meeting of the American College of Surgeons for the States of Oklahoma, Texas and Arkansas was held in Tulsa, Oklahoma, on January 28 and 29. A large number of Arkansas physicians were in attendance.

Election of officers for Arkansas Division, for 1927, resulted in office falling on H. Fay H. Jones of Little Rock, Secretary; P. W. Lutterloh, Jonesboro, Chairman; T. F. Kitchell, Texarkana, Councilor. Little Rock was chosen as the next meeting place, January, 1928.

Dr. Wm. R. Grayson of McGehee, Dr. H. E. Cureton of Conway, and Dr. Preston Hunt of Texarkana recently visited in Little Rock.

The Pulaski County Medical Society met February 14, 1927, at which time they were complimented by the Woman's Auxiliary with a spaghetti dinner, which was followed by an address by Dr. J. H. Lenow, Dr. Will Miller, Dr. F. Vinsonhaler and Dr. E. Meek.

Dr. W. A. Evans of Chicago, health editor of the Chicago Tribune, spoke to a large audience at the High School in Little Rock, February 10th.

He called attention to the lengthened span of life under improving health conditions, and said that prosperity could be brought to its highest state through health conditions, industrial development and economic efforts that make for high efficiency.

Dr. Evans talked on the teachers' part in public health work.

RESOLUTIONS

On the death of Dr. J. M. Osborne, Howell

Whereas, on the 5th day of January, 1927, the Almighty Ruler of the Universe removed from our midst, our beloved friend and co-laborer, Dr. J. M. Osborne of Howell, who joined the Woodruff County Medical Society in 1903, and served as president in 1926.

Whereas, the members of the Woodruff County Medical Society have lost a worthy and honored member and a true friend; the public has lost a wise counselor in time of need; the family has lost a kind and affectionate husband and father.

Therefore, Be It Resolved, That a copy of these resolutions be sent to the family of the deceased, and that a memorial page be set aside in the book of records of the Woodruff County Medical Society and these resolutions be spread upon the minutes, also that a copy be sent to the Secretary of the State Medical Society and to each of the county papers.

Respectfully submitted,

L. E. BILES, Secretary,
Woodruff Co. Med. So.

Obituary

C. C. PRICE—Dr. Chas. C. Price of Dumas, age 54, died January 2, 1927. Dr. Price was a graduate of the University College of Medicine, Richmond, Va., Class of '96. Moved to Arkansas soon after graduation and had practiced in Dumas twenty-seven years. He leaves a wife and two children. He was a man of sterling character and beloved by all who knew him.

J. M. OSBORNE—Dr. John M. Osborne of Howell, aged 52, was found dead at his home on the morning of January 6, 1927. He had apparently been trimming his grape vines and had fallen off the ladder, breaking his neck. Dr. Osborne was a sufferer from heart trouble, and it is supposed he had an attack while at work. Dr. Osborne was a graduate of Jefferson Medical College, Philadelphia, Class of '96, and had practiced in Woodruff and Prairie Counties for a number of years.

GRAY, LAWRENCE C.—Dr. L. C. Gray of Clarksville died January 21, 1927, following an illness of three weeks. Aged 42. He was a native of Johnson County, and had practiced medicine in Clarksville for a number of years. He is survived by his wife, one small son, two sisters and three brothers.

M CRAE, WILLIAM M.—Dr. W. M. McRae of Blytheville died February 2, 1927. Aged 50. Pneumonia was the cause of death. He was a graduate of the Memphis Hospital Medical College, and had resided in Blytheville since 1922, coming to Arkansas from Mississippi. He was an active member of the Mississippi County Medical Society. His widow survives him.

HODGES, EDWARD FRANKLIN—Dr. E. F. Hodges of Branch died February 5, 1927. Aged 47. Dr. Hodges died in a Fort Smith hospital one hour after being injured by an automobile while crossing the street. He suffered a fractured skull and never regained consciousness.

Dr. Hodges had been a resident of Branch for about twenty years and was active in civic and fraternal circles. Surviving are his wife and one daughter, both of Branch; his mother, four sisters and two brothers.

THE JOURNAL

OF THE Arkansas Medical Society

PUBLISHED MONTHLY UNDER THE DIRECTION OF THE COUNCIL

Vol. XXIII.

LITTLE ROCK, ARK., MARCH, 1927

No. 10

Original Articles

HEMORRHAGE FROM STOMACH AND BOWELS*

(In Baby Four Days Old)

H. W. BROWNING, M. D., Little Rock

The case in question is reported, not to present anything new in the outline of treatment, but on account of a few peculiar features occurring in its course.

The baby, at birth, presented nothing of any importance, out of the ordinary; was born at term and weighed six lbs. The birth record contains a note to the effect, "There were no injuries nor anomalies, condition good."

The temperature was normal from date of birth, March 24, till 8 p. m. on March 28; the fourth day of the baby's life, when it dropped to $97 \frac{2}{5}$ at 4 p. m.; at 8 p. m., and again at 9:10 p. m. there were bloody bowel movements, the blood being dark and clotted; at 9:45 p. m. the baby vomited probably 2 oz. of dark clotted blood. At 10:00 p. m. and again at 10:30 there were bowel movements, again bloody, and at 10:30 another vomiting of blood.

At 2:00 a. m., 35 cc. of paternal blood was given intramuscularly and 2 cc. of hemostatic serum was given in 2 cc. of normal salt sol. subcutaneously, and repeated every five hours till March 31st, three days, when it was lengthened to three times a day.

At 9:00 a. m., 35 cc. of paternal blood was given and at 6:00 p. m., 50 cc.

During the course of the day, the vomiting ceased, and the quantity of the bowel movements lessened materially, as did also their frequency.

On the morning of the 31st, there was a small greenish colored stool and from then on, no more blood was passed. That morning another 25 cc. of paternal blood was given and 30 cc. at 6:45 p. m.

After the initial drop of temperature on the 28th, at 4:00 p. m., the temperature rose to 103 at 4:00 a. m. on the 29th, and ranged from 100 to 103 until April 3rd, when it became normal.

On the morning of April 3rd, the temperature rose from normal to 104, at 4 a. m. of the 4th. It dropped to $99 \frac{2}{5}$ by noon and reached 104 again by 8:00 p. m. The baby was given sodium citrate on the 5th, and a urinalysis again asked for. Three days before the urinalysis showed a slight trace of albumin and five pus cells to each low powered field. On the 5th, a trace of albumin with an increase in pus cells and nine granular casts to each low powered field. Five days later the urine was alkaline, showed very few pus cells, no clumping, and four granular casts, to each field.

On April 16th, an examination of the urine showed alkaline reaction, slight trace of albumin, a few pus cells and two casts to each field. At this time the baby's weight was 6 lbs., $12 \frac{1}{2}$ -oz., but, there was a slight edema present, so the baby was changed to urotropin. The mother took it home and for a few days its progress was uneventful.

On the morning of the 20th, the mother called; on examination of the baby, the face and extremities were found to be swollen and edematous, the respiration was shallow and rapid, and baby markedly prostrated.

Physical examination revealed moist, bubbling rales, diminished breath sounds over entire chest, and there was a slight sero-sanguinous frothy expectoration, upon coughing. I took this to mean a pulmonary edema. The baby gradually became worse during the day, and died a few hours later. Unfortunately, an autopsy could not be obtained.

*Read at the 51st Annual Meeting of the Arkansas Medical Society, Hot Springs, May 18-20, 1926.

As there was no prolongation of bleeding or clotting time and in view of the fact that there was no hemorrhagic involvement of the cord, or of other mucous membranes, and the pathology appearing on the fourth day, a diagnosis of duodenal ulcer was made. This is not an infrequent occurrence in infants.

Holt stated, that the duodenal type of ulcer was much more common than the gastric type, and that 70 per cent of the reported cases had been observed between the ages of six weeks and five months, and that 10 per cent had occurred in newborn.

DISCUSSION

DR. H. THIBAUT, Scotts: Dr. Dibrell reported orally to me a case of duodenal ulcer in a newborn baby. There was an autopsy held and the ulcer was demonstrated after birth. I was hoping he would be here to hear Dr. Browning's paper, because in that case the diagnosis was confirmed by autopsy.

DR. BROWNING, in response: There is just one thing that I thought probably might have been brought up regarding this case, and that is whether or not it would have been advisable to have waited and typed the blood and given it intravenously instead of intramuscularly, but in view of the fact that it was an emergency case, and a marked emergency case at the time, and that the first blood was given at two o'clock in the morning when laboratory facilities were not available, that is the reason that the blood was not typed and that the baby wasn't given the blood intravenously instead of the whole blood given intramuscularly.

SCABIES*

SAM J. ALLBRIGHT, M. D. Searcy

One of the most common and most annoying of diseases with which the physician who does a general practice comes in contact is scabies. It is not a self-limited disease and will run on indefinitely unless properly treated. Because there are usually some people in every community who are never well of it, and because it is contagious it is one of the most common.

It is one of the most annoying because our patients do not want to have it and their modesty is sometimes shocked to a point of indignation if we tell them that is our diagnosis of their trouble. It is also annoying because we do not always get results in treating

it. There are two reasons why we do not always get results. One is lack of co-operation on the part of the patient and the other is lack of interest on our part to make a diagnosis and to properly instruct a patient in method of treatment.

The principal points in the diagnosis of scabies to which I wish to call your attention are:

First: The location of the eruption.

It never occurs on the face and is usually found on the thin areas of skin as flexor surfaces of forearm, inside of the thighs, popliteal space, in the interdigital spaces, genitalia and other places of like nature. We do not need to wait until it appears in all these areas before we call it scabies. The manner in which it has been contracted governs in a great measure the area in which it will first appear. If it is contracted from a toilet seat it is most likely to occur first on the gluteal region or on the genitalia. If contracted from bed linen or bathtub, it is likely to occur in any or all of the above mentioned places. If contracted by handling infected objects it will likely occur first on the hands.

The second point of importance in diagnosis of itch is: *Several members of the same household have the eruption.* Itch is not a one-man disease and usually by the time a physician is consulted about it several of the family or household have contracted it. This is also a point to be remembered when treating scabies. It is useless to apply treatment to Johnnie Jones and just as he is thoroughly cured have him contract it again from his brother Willie who has not taken treatment because he had only a few spots on him when Johnnie was so bad.

Third point in diagnosis—It itches worse at night. The parasite seems to rest during the day and lies dormant for the sole purpose of arousing with renewed energy when the victim is snugly covered in bed, or the very act of disrobing seems to be a signal for every mite to lengthen her burrow.

The treatment of scabies is nothing new. Years ago it was learned that sulphur will kill the parasite. Then the question arose and still exists how to best get the drug in contact with the parasite. The first step necessary is to expose the parasites in their burrows by vigorous bathing with soap and water, and the more vigorous the better—even a brush will help by removing the crusts and

*Read at the 51st Annual Meeting of the Arkansas Medical Society, Hot Springs, May 18-20, 1926.

opening the burrows. The bath is preferably given at bedtime and followed by an application of sulphur ointment covering all parts of the body from neck to toe and rubbing it in well. This ointment should be repeated each night and morning for three or four days, at the end of which time another hot bath and complete change of clothing and bed linen is ordered, there having been no bathing nor change of clothing during the time of treatment. It is necessary also to see that infected clothing, linen, bathtubs, etc., are sterilized to prevent reinfection.

There are some persons with skins susceptible to sulphur to such an extent that it will produce an itching eruption during treatment. The patient should be instructed to apply nothing in the way of treatment for three days after the second bath and then report to the physician. If patient still itches at night, it will be necessary to give him a second sulphur treatment. If he does not itch at night, the eruption will soon clear up without any treatment or upon the application of zinc oxide ointment.

In such a short paper as this, it is hardly necessary to summarize but briefly my paper is this:

Itch is common and annoying both to patient and physician, and because it is, it deserves our attention.

The three principal points in making a diagnosis are:

Location of eruption.

Several members of the same household affected.

Itches worse at night.

The treatment is sulphur applied after the crusts are removed and kept on long enough to come in contact with all the mites. It should then be removed by bathing and sufficient time allowed for any dermatitis caused by the sulphur to clear up before the sulphur is reapplied; then, if the itch remains apply the sulphur treatment again.

DISCUSSION

DR. A. G. HARRISON, Searcy: I feel like saying something about this paper of Dr. Albright's, because he is from my home town, but, being neither a lawyer or a politician nor a woman, it is a very difficult matter for me to talk about something that I know absolutely nothing about. But, since this subject seems to be just the plain, ordinary old itch, I am going to tell you gentlemen just a little bit of a joke I heard on the stage in Chicago about itch a year ago now.

Two negro comedians came out, and one of them was lambasting the other one for everything on earth he could think of, telling him how mean, low-down, contemptible, black and ignorant he was. He said, "You don't even know your own age." He said, "Yes, I do know my own age, too." "Well, how old is you then?" "I'se 28 years old." "When was you born, niggah?" He said, "I was born in 1900." "And this is 1925. 1900 from 1925 leaves you 25 years." "Niggah, I'se just as good in arithmetic as what you is. I done had the 7-year itch four times and four times seven is 28. And there you is in rithmetic, 'cause figures don't lie."

I don't know anything about the etiology or the pathology or anything about the size or the shape, the color or the sex of this bug that produces this most entertaining little disease, but I do know that it is possible to have it for seven years or a total of 28 years unless the proper remedy is applied. I have always found that a sufficient amount of sulphur applied, as Dr. Albright has advised, will cure every case of itch, and if it doesn't do that, I think I have made a mistake in my diagnosis and call it something else.

The only excuse I have for attempting to discuss this paper is that some time ago I read in the Arkansas Gazette an editorial that said that some people's idea of greatness was to know a good ball player, well enough to call him by his first name. While Dr. Albright isn't a good ball player, he is a darned good doctor, an excellent citizen and a fine gentleman, and I feel grateful that I know him well enough to call him "Sam" I appreciate this practical, every-day paper. (Applause).

DR. H. THIBAUT, Scotts: There is a point of importance in the treatment of itch that was missed in the paper and the discussion so far. Itch is probably more prevalent in levee, road and timber camps and places of that sort, than in any other place in the world. Not only the inhabitants of these camps become infested with the itch mite, but everything else, the camp bedding, the place where they camp, the floor in the tent. It is absolutely useless to apply sulphur ointment in these cases to the patients only, unless you use powdered sulphur or some means of destroying these bugs in the tent and bed clothing, and the wearing apparel of these patients. You simply waste your time rubbing sulphur ointment on them, because as soon as the ointment wears off of the skin they are reinfested with the itch mite and some of our great disappointment in treating itch is due to the fact that, after one of these camps has been in the place a while, the whole area of the ground inside the tent, the tents themselves and everything in them, are covered with the itch mite simply ready to reinfest the patients as soon as the ointment is gone.

DR. G. A. WARREN, Black Rock: There was one statement made which I think is wrong, that the itch never attacks the face. It does attack the face in young babies, and makes a very ugly appearance in right young babies. Even their scalps may have scabies on them. I don't think we should overlook this, because it might mislead us in our diagnosis.

I want to comment on just one thing that Dr. Thibault said. I feel that we would make more failures than successes in applying the sulphur ointment on any case of itch one time and expect to get results. I wouldn't dare do it. I don't believe I ever did. If I have had any success in treating scabies, it has been by repeated applications and only after repeated doses does the ointment destroy the crop of organisms that are

now present and the eggs that are to hatch. Not only that, but we should instruct the family or the camp or whoever the case may be, that everything that can be boiled, in the way of clothes, bed clothes and so on, should be thoroughly boiled, or, if that can not be done, to run a hot iron over them, because you can get well of it today and catch it tomorrow.

DR. E. H. HUNT, Clarksville: I just want to add one suggestion. In a lot of places in the country where they have so much itch, they don't want to iron the bedding. They might ruin it. I instruct them to use powdered sulphur every night before they go to bed and scatter it about and sleep in it for six weeks after they are well.

DR. ALLBRIGHT, in response: I want to thank the doctors for their kindly discussion of the paper and to add that I touched in a rather an indirect way on the necessity of sterilizing everything with which the patient had come in contact. I did not mention the ground on which the tent stood; but I did mention bathtubs, toilet seats, etc.

In regard to the occurrence of itch on the face, the literature shows a difference of opinion. Schaumberg says it sometimes occurs on the face in children. Other authorities say it never occurs on the face.

Abstracts

GLANDULAR THERAPY

Articles on glandular therapy have been prepared under the direction of the Council on Pharmacy and Chemistry for inclusion in a new edition of the series of articles on Glandular therapy which was published in *The Journal*, Sept. 27 to Dec. 20, 1924. The first article is by J. B. Collip, Edmonton, Alta. (*Journal A. M. A.*, Feb. 19, 1927), on the chemistry and physiology of the calcium mobilizing hormone of the parathyroid glands. Briefly, the function of the hormone in the normal animal appears to be that of a regulator of calcium metabolism, and its action is primarily as a calcium mobilizer. The second article is written by William S. McCann, Rochester, N. Y. (*Journal A. M. A.*, Feb. 19, 1927), on parathyroid therapy. He says that it is now possible to assert with confidence that we possess a therapeutic agent derived from the parathyroid gland which produces profound changes in the calcium metabolism, so that when dogs are deprived of their parathyroid glands, the resulting condition of tetany is relieved by the injection of this substance, with a coincident return of the calcium metabolism to normal. The use of parathyroid extract is clearly indicated in the

treatment of tetania parathyreopriva and in infantile tetany. The effect on gastric tetany has apparently not yet been investigated. None of the preparations at present available are entirely satisfactory. Local irritation is often very marked, and it is doubtful whether long continued use is possible without the additional use of calcium.

DIPHTHERIA IMMUNIZATION IN PROVIDENCE

On the basis of more than three years' experience in Providence, involving the Schick testing and immunization of some 15,000 children, it would appear that toxin-antitoxin immunization eliminates approximately 90 per cent of the risk of contracting diphtheria in the immunized group. During this time 38 per cent of all children in the age group 5-9 and 24 per cent of the children in the 10-14 year group have been immunized. In the group under 5 years, in which the morbidity and mortality from diphtheria are practically at their height, hardly 4 per cent of the children have been immunized. To make immunization wholly effective, some method must be devised to reach this susceptible group. To meet this need the health department is sending to the parents of every 6 months old child in the city a notice urging immunization by the family physician or at a clinic. According to Clarence L. Seaman and Alton S. Pope, New York (*Journal A. M. A.*, Feb. 19, 1927), results of the campaign can already be seen in increased demands on physicians and pre-school clinics for immunization against diphtheria.

The United States Internal Revenue Department, which has to do with the enforcement of the so-called *Narcotic Act*, has recently discovered that physicians are not complying with the letter of the Law in writing prescriptions in ink or using an indelible pencil for the same, and even at times they are failing to use ink in executing narcotic blanks. Your attention is called to Article 118 of the Act—"Responsibility."—"The duty of properly preparing prescriptions is upon the practitioner, and he is liable to the penalties provided by the Act in case of failure."

You will save yourselves embarrassment, as well as the druggist, by complying with the letter of the Law.

THE JOURNAL

OF THE

ARKANSAS MEDICAL SOCIETY

Owned by the Arkansas Medical Society and Published under the direction of the Council.

WILLIAM R. BATHURST, Editor
810-812 Boyle Building, Little Rock, Arkansas.

Published Monthly. Subscription \$3.00 per year; single copies 25 cents.

Entered as second-class matter, June 21, 1906, at the postoffice at Little Rock, Arkansas, under the Act of Congress of March 3, 1879.

Acceptance for mailing at special rate of postage provided for in Section 1103, Act of October 3, 1917, authorized August 1, 1918.

The advertising policy of this Journal is governed by the rules of the Council on Pharmacy and Chemistry of the American Medical Association.

All communications of this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the State. Notice of deaths, removals from the state, changes of location, etc., are requested.

OFFICERS OF THE ARKANSAS MEDICAL SOCIETY

J. M. LEMONS, President.....	Pine Bluff
HENRY THIBAUT, President-Elect.....	Scott
G. E. TARKINGTON, First Vice-President.....	Hot Springs
T. F. KITTRELL, Second Vice-President.....	Texarkana
J. H. FOWLER, Third Vice-President.....	Harrison
R. J. CALCOTE, Treasurer.....	Little Rock
WM. R. BATHURST, Secretary.....	Little Rock

COUNCILORS

First District—THAD COTHERN.....	Jonesboro
Second District—J. L. JONES.....	Searcy
Third District—M. C. JOHN.....	Stuttgart
Fourth District—W. T. LOWE.....	Pine Bluff
Fifth District—W. P. COOKSEY.....	Magnolia
Sixth District—B. C. MIDDLETON.....	Texarkana
Seventh District—DEWELL GANN, SR.....	Benton
Eighth District—ANDERSON WATKINS.....	Little Rock
Ninth District—SAM G. DANIEL.....	Marshall
Tenth District—THOMAS DOUGLASS.....	Ozark

COMMITTEES

SCIENTIFIC PROGRAM—R. J. Calcote, Little Rock, chairman; A. S. Buchanan, Prescott; R. H. T. Mann, Texarkana.

SCIENTIFIC EXHIBIT—C. E. Oates, Little Rock, Chairman; Homer Scott, Little Rock; D. E. White, El Dorado.

MEDICAL LEGISLATION—Earle H. Hunt, Clarksville, chairman; J. W. Walker, Fayetteville; Thad Cothern, Jonesboro.

STUDENT LOAN FUND—E. F. Ellis, Fayetteville, chairman; J. H. Lenow, Little Rock; Wm. R. Bathurst, Little Rock; G. A. Warren, Black Rock.

NECROLOGY—Cowley S. Pettus, Little Rock, Chairman; F. B. Kirby, Harrison; E. E. Barlow, Dermott.

HEALTH AND PUBLIC INSTRUCTION—C. W. Garrison, Little Rock, chairman; F. Michael Smith, Pine Bluff; M. E. McCaskill, Little Rock; President and Secretary of State Society.

CANCER CONTROL—Dewell Gann, Jr., Little Rock, chairman; John S. Jenkins, Pine Bluff; J. C. Hughes, Hoxie.

INFANT WELFARE—A. C. Kirby, Little Rock, chairman; N. D. McCormack, Ft. Smith; H. W. Browning, Little Rock.

HOSPITALS—J. D. Southard, Fort Smith, chairman; D. A. Rhinehart, Little Rock; J. T. Palmer, Pine Bluff.

Editorials

OUR ANNUAL MEETING

Time comes on apace and again we call attention to the fact that the date is near for the annual meeting of the Arkansas Medical Society, which will convene in Little Rock, May 11th to hold sessions for three days. Dr. J. M. Lemons of Pine Bluff, the president, will preside. Headquarters and meeting place for all sessions will be at the Capital Hotel. An excellent meeting is anticipated. A preliminary report of the program committee is given under news items in this issue of the Journal.

Among the distinguished guests that have accepted invitations to speak at this meeting we find Dr. Seale Harris of Birmingham, Ala. Dr. William Engelbach of St. Louis, Mo. and Dr. C. M. Rosser of Dallas, Texas.

According to precedent the morning of the first day will be the meeting of the House of Delegates, the afternoon to the opening addresses including the President's annual message. The first evening will be devoted to a public session at which Dr. Rosser will speak on matters pertaining to the public welfare. The next evening will be devoted to entertainment. On the second morning the Memorial Session and unveiling the monument placed in the City Park, that marks the spot where the first dissection was made on the human body in this State. The morning of the last day will be devoted to clinics at the various hospitals in the city.

While the Program Committee has done splendid work, insuring a profitable meeting to all who attend, the entertainment committee, headed by Dr. Homer Scott, realizing that a little fun and relaxation must be mingled with business, already has arranged an attractive program. Special entertainment will be given the visiting ladies by the local auxiliary. All together the 1927 annual meeting gives promise of being an event no member can afford to miss. Begin now to make your arrangements and allow nothing to interfere with your attendance.

ARKANSAS IN VITAL STATISTICS AREA

At last, after years of effort, the Census Bureau will accept Arkansas' vital statistics and for the first time the State will be in-

cluded in the Registration Area. It should have been there long ago and would have been but for the difficulty of obtaining birth and death statistics throughout the State, many of the more remote mountain countries having been lax in keeping reports. This is not surprising when one considers the distances from county seats of many localities and the sparsely peopled sections. Even now some of these counties cannot be depended upon for complete and accurate statistics and they will fall behind the 90 per cent required; but this deficiency will be made up by the complete statistics from the counties with larger population, with cities and large towns and with adequate transportation facilities and means of communication with county seats.

This is an excellent advertisement for Arkansas. It puts us on the map, so to speak, with other progressive States. It will acquaint the country with its low mortality rate and will correct the mistaken idea of unhealthiness of climate based on the stories emanating from the marshy bottoms and the attendant malaria in the years before any steps were taken to eliminate the mosquito.

Correct vital statistics also will tend to make the State more beautiful because the State Board of Health and the health officers, by studying the returns will be able to ascertain if certain ailments, especially infectious and contagious diseases, are rife in any locality and to apply the remedy—both curative and preventive.

PROGRESS OF THE WOMAN'S AUXILIARY

That the Woman's Auxiliary to the various Medical Societies in the States and of the American Medical Association has come to stay and to be a distinctive force is evidenced by the growth of the movement. This is further stressed by the publication of the Bulletin of the Woman's Auxiliary of the American Medical Association, the first number of which has reached our desk. It is to be issued quarterly. It is published under the direction of the executive board and is edited by Mrs. Allen H. Bunce of Atlanta. A definite plan of financing the publication will be adopted at the next annual session to be held in Wash-

ington D. C., next May. Arkansas is given mention in the publication of the names of standing committees in the various States, Mrs. Homer Scott of Little Rock being named as of the finance committee, and Mrs. C. W. Garrison of Little Rock, director.

Comparative statistics are given of the auxiliaries now organized and being organized.

The first number contains a report of the proceedings of the Southern Medical Association held in Atlanta; a greeting from Mrs. Seale Harris of Birmingham; a report of the chairman of HYGEIA, the health publication sponsored by the American Medical Association; an editorial department with comments on the meeting of the Executive Board of the Woman's Auxiliary of the American Medical Association, written by Mrs. F. P. Gengenbach of Denver; a directory of component auxiliaries with the names of the presidents, which includes Mrs. Dewell Gann, Sr., of Benton as president of the Arkansas Auxiliary; an appeal for support of the movement and the importance of paying dues by Mrs. Irvin Abel of Louisville, Ky., and other matters of interest to members.

Mention must be made also of an article by Dr. Olin West, Secretary of the American Medical Association, Chicago, in which he gallantly and truthfully remarks that "The greatest and best auxiliary of the doctor is the doctor's wife" and he proceeds to tell of how in a hundred ways she is a daily help and inspiration. Also there is a beautiful article by Mrs. S. C. Red of Houston, Texas, one of the founders of the auxiliaries, which tells of the charm of love, which has led so many thousands of women to share the lives of medical men of the country. The auxiliary itself is an expression of love, she holds. Women belong to it because they love their husbands and their profession. She closes by sending a message of love to all, even including "the dear grouchy old fellows, who do not approve of the auxiliary, because they just have not stopped to realize what the auxiliary means. It just means love—that is all."

With the high standard set in the first number of the Bulletin the editor predicts that soon it will be appearing as a monthly instead of a quarterly.

SPLENDID PLAN FOR POST-GRADUATE WORK

Our readers are familiar with the truism attributed to Mahomet "if the mountain will not come to Mahomet, Mahomet must go to the mountain." Until recently the practitioner who wished to take a post-graduate course at any great school had to sacrifice time and money to obtain it. Very many physicians were unable to spare either the time or the money. But, unlike the problems of Mahomet's mountain, means have been found to bring the post-graduate course to all unable to go after it.

This great plan offered the physicians of Arkansas yields the post-graduate course without the beneficiaries having to leave their practice or their bailiwick. The plan is both simple and practical. Instructors from the large medical schools are engaged. At dates to be arranged one of these eminent specialists will teach one course at a time, each course covering a period of nine weeks. He will teach one class a day in different counties, he making a circuit every nine weeks. The places where instruction will be given will be selected so as to be the most convenient to the greatest number of students. Each day will cover one hour of lectures and two hours of clinic and at each visit to every place on the circuit six days will be devoted to work. Each doctor may furnish two cases from his own patients; he will be given specific advice about the cases he presents or on any medical subject.

This form of obtaining post-graduate medical study is the latest plan of the school of medicine, University of Arkansas and will be conducted under the personal supervision of Dr. Morgan Smith, dean of the school.

This wonderful service giving the physicians of the State a strictly up-to-date course, keeping them fully abreast of the latest advance in medical science, is offered at the actual cost. The plan is not an experiment. It has been in operation with marked success in North Carolina and was adopted in Oklahoma last summer. This plan is so self-evidently advantageous and offers such splendid opportunity to Arkansas physicians that the Journal feels that our members throughout the State will need no urging to get behind this movement and co-operate to the fullest extent.

Abstracts

NEED OF TEACHING MEDICAL ETHICS

Arthur Dean Bevan, Chicago (Journal A. M. A., Feb. 26, 1927), says that with the great advances of modern medicine and the greater range of application of medical and surgical therapy, there has developed a greater opportunity of misusing the sacred privileges of the physician and surgeon. The time has arrived when the organized profession, *i. e.*, the American Medical Association should take steps to do everything in its power to correct such evils as exist and to educate medical students and the profession in the importance of sound ethics and practice. The "Principles of Medical Ethics" of the American Medical Association is an admirable short presentation in three chapters of: The duties of physicians to their patients; the duties of physicians to each other and to the profession at large, and the duties of the profession to the public, concluding with a short summary of the principles involved. The "Principles" are published by the American Medical Association and distributed to the profession. An effort is made to provide each medical student with a copy at graduation. In the next revision of the "Principles of Ethics," Bevan suggests elimination of the conception, at least the implied conception, that a physician has a certain ownership in a patient by virtue of the fact that the patient has consulted him. It should be made perfectly clear that such an ownership does not exist, and that the patient has a perfect right to consult any physician he desires. In the last fifty years, he continues, the practice of medicine has become more and more surgical. As a result, new operative procedures have been developed and perfected, and thousands of people have been relieved or cured by properly indicated and properly performed operations. Fees for operations have become a larger and larger part of the profession's income. This great increase in surgical procedures has brought with it two new and serious problems; *i. e.*, the doing of some unnecessary operations, and the performance of operations by men who are relatively incompetent. The great majority of operations done are desirable and necessary and are done by medical men competent to do them; on the other hand, many operations are

done which may not be necessary, and many are badly done by incompetent men. The medical student and the practitioner of medicine should be taught that when he undertakes the treatment of a patient he makes a contract with the patient, that is legally binding, to give the patient the benefit of the knowledge possessed by the "professors" (the men who profess to be medical men) of the science and art of medicine in the place and at the time the services are rendered. It is, therefore part of sound medical ethics for the physician to make himself competent. He is also bound to give his patient the benefit of good judgment, and sound medical ethics requires that in his dealings with his patient he must be governed by the Golden Rule. He should never do an operation on a patient which he would not want to have done on himself under the same circumstances. The three absolutely essential requirements of the medical man are honesty, good judgment and scientific training; and the greatest of these is honesty. Speaking of the division of fees, Bevan says: "I believe that the evil is diminishing. It is, however, still a common practice in some localities and should be eliminated by drastic measures. It is a matter which from the standpoint of either medical or general ethics is not open to argument. The medical man who deceives his patients by some scheme of division of fees might just as well pick his patients' pockets. This practice should be done away with by the teaching of sound medical ethics."

What is the best way to teach medical ethics to medical students and the profession? It will not do simply to hand out to every student when he graduates a copy of the "Principles of Medical Ethics." It will not do to publish a paper on this subject every few years. We must place modern medicine on a sound ethical basis. We must eliminate the unethical things in practice, wherever and whenever they creep in. The remedy lies in the education of the profession and of the public. This means an educational propaganda carried on not one day a year but throughout the year, and year after year, by the organized medical profession, the American Medical Association through its great journal, its Bureau on Health and Public Instruction and its Council on Medical Education. This same work can be carried on in every State by the State societies and their journals. The first

class medical schools of the country should teach their medical students sound medical ethics by lectures, precept and example. The national special societies, such as make up the Congress of Physicians and Surgeons and the American College of Surgeons, should all do their part in this great educational campaign."

Personal and News Items

Arkansas physicians visiting in Little Rock during the past month include: Geo. S. Brown, Conway; Loyd Thompson, Hot Springs. W. H. L. Woodyard, Judsonia; C. H. Cargile, Texarkana.

WANTED—Salaried appointments for Class A physicians in all branches of the medical profession. Let us put you in touch with the best man for your opening. Our nation-wide connections enable us to give superior service. Aznoe's National Physicians' Exchange, 30 North Michigan, Chicago. Established 1896. Member the Chicago Association of Commerce.—(Adv).

Dr. J. C. Land of Walnut Ridge and Miss Elizabeth Davis of Paragould were married January 5, 1927.

The annual meeting of the Arkansas State Medical Society will be held in Little Rock, May 11 to 13; the annual meeting of the American Medical Association will be held in Washington, May 16 to 20. Arkansans going to both meetings will do well to plan as for one continuous trip.

Dr. Geo. F. Jackson has returned from New Orleans where he attended the Dermatological Clinics.

The Pope County Medical Society met in the new Pearson Hotel in Russellville, February 24.

The purpose of this meeting was to outline a constructive program to be carried out the ensuing year in both a professional and social way. The society was in a sense converted into a luncheon club, and will have luncheon every second Thursday night in each month at 6:30 at the new Pearson hotel just before the regular meeting hour.

One of the most important things done at this meeting was the endorsement of the extension courses sponsored by the medical department of the University of Arkansas. By this means, specialists on different subjects will be available to lecture and hold classes for the benefit of the society.

In future meetings there will be clinical material for study and discussion, papers read, and talks made by members.

THE LEGISLATIVE COMMITTEE
OF THE
ARKANSAS MEDICAL SOCIETY

Jonesboro, Ark., Feb. 14, 1927.

Drs. J. M. Lemons, Wm. R. Bathurst,
Earl Hunt, and J. W. Walker.

Re: Present and Immediate Future Activities of Legislative Committee.

Dear Doctors:

We mailed out 1,150 form letters to the *doctors* of our State, a copy of the letter is attached, and we received 102 replies. Much good meat is in many of the letters received. Many worthwhile suggestions were made. Many expressed a preference for *one* thing only; some for *two* or *three* alternatives; and several had as many as *four, five, six* or more alternatives. Our final summing up of the *wants* made known to us by these letters does not bear a definite ratio to the number of letters received due to fact that many of the letters had more than *one* wish expressed.

Fourty-four (44) desired a *basic educational* bill as recommended by the Legal Medicine and Legislative Bureau of the A. M. A. Forty-six (46) desired the Medical Practice Act to remain as it now is *but to arrange some way for its enforcement*. Five (5) desired a *composite* board with a ratio of 4-2-1 *regulars, eclectics* and *homeopaths*. Twenty-eight (28) wished to leave it up entirely to the *legislative committee*. Two (2) were for making a *high school course* sufficient educational requirement for entrance to a medical school. Three (3) desired a *State General Hospital* as their main wish. Two (2) desired a *Hospital* for *every county* with a levy of 1 mill tax for its erection and maintenance. Three (3) expressed a wish for the *junior medical* students to be given temporary permits to practice.

Seven (7) expressed a wish *not* to give a permit to practice to a junior medical student. One (1) desired the *primary* examinations be given by *non-medical* men. Twenty (20) suggested a policy of "watchful waiting" for some of the *eults* and *fads* to die out. Many—we did not count them all—desired a full enforcement of whatever law was now on the Statutes or might be enacted, and over a *thousand*, by their silence, expressed no interest.

Now, *what shall we do?*

Am attaching a copy of a letter from Dr. C. E. Swift of Elkins, which, I think, fairly expresses our status and contains a workable procedure. Dr. E. F. Ellis suggests that Dr. Swift's letter be published in the next issue of our State Journal.

We wish to submit the above summary to you. Study it over carefully and write to each other your idea as to our campaign *objective*. Have hurried things all I could with the above result.

From my personal viewpoint, I believe our Governor and Attorney General will heartily co-operate with us in enforcing our present law, if we will get interested enough to *show them* where it is being violated. They are both sincere, high ideal type men. It is by and through these offices that the enforcement of this law begins and ends.

Sincerely yours for service,

THAD COTHERN, *Acting Secretary*.

Elkins, Arkansas, Feb. 3, 1927.

Dr. Thad Cothern
Acting Sec'y Legislative Committee
Jonesboro.

My Dear Dr. Cothern:

The letter addressed to the members of the Arkansas Medical Society received. Since your committee has gone to the time and trouble to take up this matter of Medical Legislation with the individual members of the Society, I deem it courteous that you should have a reply.

I have just finished reading with considerable interest the January number of the Journal of the Arkansas Medical Society, which contains a report of the meeting of the mid-winter session of the Council and which sets forth the views expressed by the men who met

there and discussed this important problem confronting the medical profession in Arkansas.

It appears that this meeting adjourned with the feeling that a composite board of medical examiners is not desirable; that the Medical Practice Act now on the Statute book is sufficient to cover the need of medical regulation and protection, and that the chief end to be arrived at is a due enforcement of that Act. My personal views at this time are fully in accord with this acceptance of the situation. The law governing the licensing of applicants to practice medicine in Arkansas seems very clear and comprehensive and if adhered to would admit only creditable men into the State.

After due examination it also appears that the most noticeable area of hyperesthesia of the "corpus medicina" in Arkansas is the influx of graduates from the notorious Kansas City College of Medicine and Surgery. This institution, posing as an eclectic school of medicine, is, of course, well known to all medical men, and to quite a percentage of the laity, as a disreputable diploma mill whose activities have been quieted and whose charter has been revoked by legal procedure. It is also known that this institution has been re-organized under a different name and is again ready for business. The individual who has been responding to the name of Sallie has now become Miss Sarah and under future conditions may be known as Aunt Sallie, in other words it is the same girl, just a slight change in name. The admission of the graduates from that school to practice medicine in Arkansas is a flagrant violation of the Medical Practice Act and the Eclectic Examining Board of Arkansas is guilty of such violation especially since the public exposure of this school, if it may be entitled to the dignity of the name of Medical School. I may admit that some of the men coming from this institution are competent in a medical way and may deport themselves as ethical gentlemen; but that admission does not alter the fact that the eclectic board has openly transgressed the law in granting them licensure in Arkansas. Unless some measures are formulated to stop such actions of the Eclectic Board, Arkansas will continue to be the "dumping ground" of the graduates of the Kansas City School. This state of affairs has caused the finger of scorn and opprobrium to be pointed at our

fair realm by organized medicine outside the State. It is not fair that we should so suffer and the condition should be corrected.

All the above is, no doubt, ancient history to you. You have heard it until you are wearied and perhaps have hoped never to hear it again. It is merely a prelude to a suggestion I have to offer, a prescription, which, if properly applied, may help to heal the ulcer which is eating its way into the vitals of our medical body. The proposed plan has come into my mind after due consideration of the situation. I believe it is workable and should prove efficient. It has been truthfully said that "what is every one's business is no one's business. So far as I know the responsibility of seeing that the Medical Practice Act is enforced in Arkansas has not been delegated to anyone in particular and I believe that this responsibility should be assumed or placed upon someone who would make it their particular business to attend to it. A "Committee for Law Enforcement" should be appointed from the Arkansas Medical Society, whose duty would be to make an accurate survey of medical conditions in the State relative to the enforcement of what medical legislation is now available. It should be a part of their duty to gather the evidence of violations and present such proof to proper authority for indictment and prosecution. With the co-operation of the component county societies the work of this committee should not be difficult nor onerous. Each county society should be conversant with the personnel of the profession in its respective domain and should be able to report any irregularities existing therein. I see no good reason why this plan is not feasible.

If the Arkansas Medical Society is to be the Hercules whose job it shall be to clean the Augean stables of medical filth and consequent stench in Arkansas, it will probably discover that the task will not be accomplished in a day, but that it will require concert of effort, that the campaign will not be a passive one, but one of action and aggressiveness. The honor to the profession of the State accruing therefrom should be sufficient reward for the labor expended and the slogan should be, "It shall be done."

Respectfully and Fraternally Yours,

C. E. SWIFT.

Communications

Baltimore, February 3, 1927

TISSUE DIAGNOSIS IN THE OPERATING ROOM

And Immediate Cover-slip Examinations of
All Fluids and Pus

Dear Doctor:

I shall consider it a courtesy if you will publish this letter in your Journal, as I am very desirous to get in correspondence with pathologists and surgeons interested in the immediate examination, by frozen section, of tissue in the operating room and the immediate cover-slip studies of smears from all fluids and pus.

Microscopic examination of stained frozen sections has been possible for more than a quarter of a century. The staining of unfixed frozen sections with polychrome methylene blue and other stains is a well-established procedure. In many operating rooms in university and other large and small surgical clinics, provisions for these immediate diagnostic studies have not only been available, but have been in practical use for years. While, unfortunately, on the other side, this diagnostic part of the operating room is conspicuous for its absence in many clinics.

Before 1915 it was rarely necessary for a surgeon well-trained in gross pathology to need a frozen section to help him in diagnosis at the operating table. Since 1915, and especially since 1922, the public has become so enlightened that malignant disease formerly easily recognized either clinically or in the gross, now appears in our operating rooms devoid of its easily recognized clinical and gross appearance and can only be properly discovered by an immediate frozen section. The majority of operating rooms are not equipped nor prepared for this new diagnostic test.

The first essential part for this diagnosis is the technician—one to cut and stain the frozen section, or to make and stain the smear. The second is a pathologist trained to interpret it. It is possible for the surgeon to be all three in himself, and some young surgeons are so equipped. In others it is a dual combination—surgeon and pathologist in one, and the technician. More frequently it is three—operator, technician and pathologist. It makes little difference whether it is one, two or three

individuals, providing each has the equipment and training for this most difficult diagnostic test.

In the address as chairman of the surgical section of the Southern Medical Association, I discussed biopsy, and this paper has been published in the Southern Medical Journal for January, 1927 (Vol. XX, page 18). A reprint of this paper will be sent to anyone on request. The chief object of this letter is to come in contact with surgeons and pathologists who are sufficiently interested in this problem to discuss it either by correspondence or by attending a meeting in the surgical pathological laboratory of the Johns Hopkins Hospital, either the Monday before, or the Friday after the meeting of the American Medical Association in Washington.

Schools for technicians may have to be established in different sections of the country, and the surgical pathological laboratories of the medical schools and the larger surgical clinics should offer courses in this tissue diagnosis, so that surgeons may learn to become their own pathologists, or pathologists learn the particular needs of the surgeon in tissue diagnosis in the operating room.

It is quite true that when the majority of the public are fully enlightened, the surgeon will see lesions of the skin and oral cavity and the majority of subcutaneous tumors when they are so small that their complete excision is not only indicated, but possible without any mutilation. The chief danger here will be a surgical mistake—the incomplete removal of an apparently innocent tumor. There is no necessity here for biopsy. If a proper local excision is done, no matter what the microscope reveals, that local operation should be sufficient. But when lesions of the skin, oral cavity and soft parts are extensive and their complete radical removal mutilating, then there must be biopsy to establish the exact pathology.

In tumors of the breast and disease of bone, for years, the diagnosis could be made clinically, or from the gross appearances at exploration. But now, in an increasing number of cases, the breast tumor must be explored, and the gross pathology of this earlier stage is not sufficiently differentiated to allow a positive diagnosis. Immediate frozen sections are essential to indicate when the complete operation should be done. The same is true of the earlier stages of lesions of the bone. The

x-rays no longer make a positive differentiation between many of the benign and malignant diseases, for example, sclerosing osteomyelitis and sclerosing osteosarcoma.

We must not only specialize in tissue diagnosis, but we must organize this department so it will function in as many operating rooms as possible in this country.

Then there is a final and most difficult question to consider. I doubt if it can be settled. What shall be done in those operating rooms in which there is no technician to make the sections and no one trained to interpret the microscopic picture? How can a piece be excised or a tumor removed, for example, from the breast, and this tissue sent to some laboratory for diagnosis without incurring the risk of the delay to the patient. I have discussed this point in my paper on biopsy.

JOSEPH COLT BLOODGOOD,
Surgical Pathological Laboratory,
Johns Hopkins Hospital.

PRELIMINARY PROGRAM FOR THE MAY MEETING, ARKANSAS MEDICAL SOCIETY

Dr. William Engelbach, St. Louis, "The Diagnosis and Treatment of Defective Children, with Lantern Slide Demonstration;" Dr. Seale Harris, Birmingham, "High Fat, Low Carbohydrate Diet in Gastric and Duodenal Ulcer;" Dr. C. M. Rosser, Dallas, will deliver the address at the Public Session on the first night. The following physicians in the State will read papers: H. H. McAdams, Jonesboro, "Medical Treatment of Goiter;" J. H. McCurry Cash, "Replacement Therapy;" F. Michael Smith, Pine Bluff, "Preventive Medicine;" T. F. Kittrell and J. K. Smith, Texarkana, subjects yet to be announced; H. King Wade, G. B. Fletcher and O. C. Wenger, Hot Springs, subjects to be announced; J. H. Fowler, Harrison, "Leukemia;" L. L. Purifoy, El Dorado, "Congenital Pyloric Stenosis, with Report of a Case;" T. H. Jones, Magnolia, "Electro Therapy in the Treatment of Vomiting of Pregnancy;" R. C. Dorr, Batesville, subject to be announced; Don Smith, Hope, "The Treatment of Diarrheas in Children;" S. C. Fulmer, Little Rock, "Tularemia;" E. H. White, Little Rock, "The Use of Pituitrin in Obstetrics;" P. L. Mahoney, Little Rock, "Sinusitis;" C. S. Williamson, Little Rock, "Post-Operative Treatment in Laparotomy Cases;" R. F. Darnall and Morgan Smith, Little Rock, subjects to be announced.

County Societies

CRAIGHEAD COUNTY

(Reported by THAD COTHERN, Sec.)

The Craighead County Medical Society met in Jonesboro, March 4, 1927, in the office of Dr. Cothern. None of the presiding officers being present at the time to open the meeting Dr. Walker took the chair and called the meeting to order.

Dr. D. L. Boyd of Lake City, sent a patient out for clinical study. Some time was spent in examining the patient, after which the case was taken up and discussed in detail. Much benefit was derived by the examination and discussion of this patient's ailment, and it is hoped a like benefit will come to the patient.

The Secretary read an editorial from the Fort Smith Times-Record of February 17th, together with a paper by Dr. C. H. Kennedy of Fort Smith, on the need of more tolerance and a better co-operation among medical men. This editorial was an expression of the "new thought" of the present rather disorganized condition of Medical Practice, Specialism, Education and Teaching.

The next matter taken up was reading of a telegram from Little Rock to the effect that an effort was being made in the Legislature now in session to so amend the present Medical Practice Act as to admit for licensure to practice medicine any and all diploma mill products who might come. All newspaper readers will remember that a very short time ago a bogus medical school in St. Louis and one in Kansas City were exposed to public view and were closed. As you will further remember Arkansas granted medical license to a whole train load of "diplomats" of those two schools and just why these fraudulent licenses have not been revoked is yet unexplained. These two schools have been re-organized under *new names* but are operated by the same bunch of medical grafters and they now have a large "class" ready to be "graduated and to whom they have promised *Arkansas license*. No other State will think of admitting any uneducated so-called "medical men" to practice and we see no good reason why some persist in trying to make Arkansas the dumping ground for the medical offal from everywhere. The people of our State should not be so exposed as to be a prey for all this bunch of poorly trained, uneducated men, who, of course, wish

to feast somewhere. Our present State Medical Law expressly prohibits the "graduates" of the sub-standard or bogus medical school from appearing before the Medical Board for licensure.

Further plans as to the entertainment of the District Society in April, were discussed and some papers for the meeting were secured.

There being no further measures for discussion the usual motion to adjourn was carried.

Present: Burns, Cothorn, Haltom, Jackson, P. W. Lutterloh, McAdams, McCurry, Ramsey, Walker and Willett.

CRAIGHEAD COUNTY

(Reported by THAD COTHERN, Sec.)

The first meeting of the Craighead County Medical Society for February was held in the Jonesboro Clinic Building on the 4th. President S. W. Moreland, being absent the meeting was called to order by the first Vice-President, Dr. Ira Ellis of Monette.

Dr. Mullin of the Crile Clinic, Cleveland, Ohio, was the principal speaker of the evening. His address was a very able one and was of special interest to all. In his preliminary remarks Dr. Mullin stated that it afforded him a very great pleasure to see the professional loyalty and sincerity of the physicians of Jonesboro and the surrounding country; that it was evident that the physicians of this territory upheld the high ideals of the true physician in giving service to his patient and co-operation to his fellow doctor; that the few days spent with the membership of the Tri-State Association and the doctors of this and surrounding counties would ever be remembered with pleasure, because of the spirit of tolerance and good fellowship everywhere apparent. The scientific part of this address was of great interest and every one present felt "that it was good to be here." At the close of Dr. Mullin's address, Dr. Willett voiced the appreciation of the society for the doctor's visit and address.

Among those present were: Lunt and Parrish of Reector; Robinson of Portia; Bridges of Paragould; Barrett of Black Oak; Ellis of Monette; McCurry of Cash; O. V. Smith of Bay; Pratt, Shenlever, Altman, Cothorn,

Burns, Horner, P. W. Lutterloh, Chas. Lutterloh, McAdams, McCracken, Jernigan, Ramsey, Walker, Willett and Herbert Parker of Jonesboro.

JEFFERSON COUNTY

(Reported by J. C. BEARD, Sec.)

The Jefferson County Medical Society held its regular monthly meeting at the office of Doctors Palmer and Lowe on the evening of March 1, 1927; Vice-President, Dr. John, presiding.

Other members present were; Drs. Woodul, Capel, F. M. Smith, S. E. Smith, Troupe, Gurney, T. J. Cunningham, Lemons, Hughes, Higginbotham, Beard.

The program committee reported that Dr. Gurney had agreed to read a paper at the April meeting and Dr. Glover had been appointed to open the discussion.

Dr. Lemons reported that the negro boy whom he presented at the January meeting of the society, seemed to be going steadily downhill. He is now running a temperature of 100-103. He is orthopedic. There are many rales throughout right side of chest, and loss of appetite.

Dr. Gurney reported an interesting case in a child who for eight weeks had been having attacks of sore throat, fever and earache. Four weeks ago the child complained of lancinating pains in the ear. There was considerable fever and an area of swelling over mastoid and temporal regions. An x-ray plate of the mastoid sinus was negative. He aspirated and obtained pus. He then incised and drained the abscess and found what he thought was probably a sinus leading down to the middle ear. A culture from the pus showed short chain streptococci.

Dr. Woodul reported a case of senile gangrene of the foot which had been treated by a "hoodoo" doctor without improvement. Dr. Woodul amputated above the knee. There was such an extreme of arterio-sclerosis that when the vessels were cut there was no bleeding.

Dr. F. M. Smith read one of the most interesting papers we have heard in many a meeting. His subject was, "Preventive Medicine and Public Health Activities." He showed that medicine was going forward more rapidly than probably any of the other sciences and stated that preventive medicine

and public health work was one of medicine's most recent specialties. He said that the first Public Health Unit began in Yakima County, Washington, in 1911. Its duties at first were the removal and disposal of debris, carcasses and tin cans and cutting weeds and such like. The work has grown rapidly. There are now between 300 and 400 county health units and its work plays a great part in preventing diseases and scourges which a few years ago almost depopulated cities and counties. He pointed out some of the duties of the Health Unit: Educational, sanitation, food control, immunology, child hygiene and maternity, laboratory, anti-malarial and anti-mosquito, life extension and vital statistics.

The paper was discussed by Drs. Lemons, Gurney, John, Woodul and Beard.

MISSISSIPPI COUNTY

(Reported by F. D. SMITH, Sec.)

The Mississippi County Medical Society met at Oseola, Tuesday, March 8, 1927.

Members present: Hosey, R. L. Johnson, I. R. Johnson, Barksdale, Ellis, Waldrop, Massey, Harwell, Hudson, Sims, Luekett, Tidwell, Usrey, Husbands, Hill, Wilson, Grimmett, Saliba, Stevens and Smith. Visitors: W. T. Black, W. T. Pride, J. J. Hobson, Casa Collier and C. M. Chilton, all of Memphis, Tenn.

This was one of the best attended meetings in the history of the Society, eighty per cent of the membership being present.

Responsibility for Life Extension is the topic of an article by Dr. Walter Donaldson, Pittsburg, in the March issue of the Atlantic Medical Journal. He says, in part:

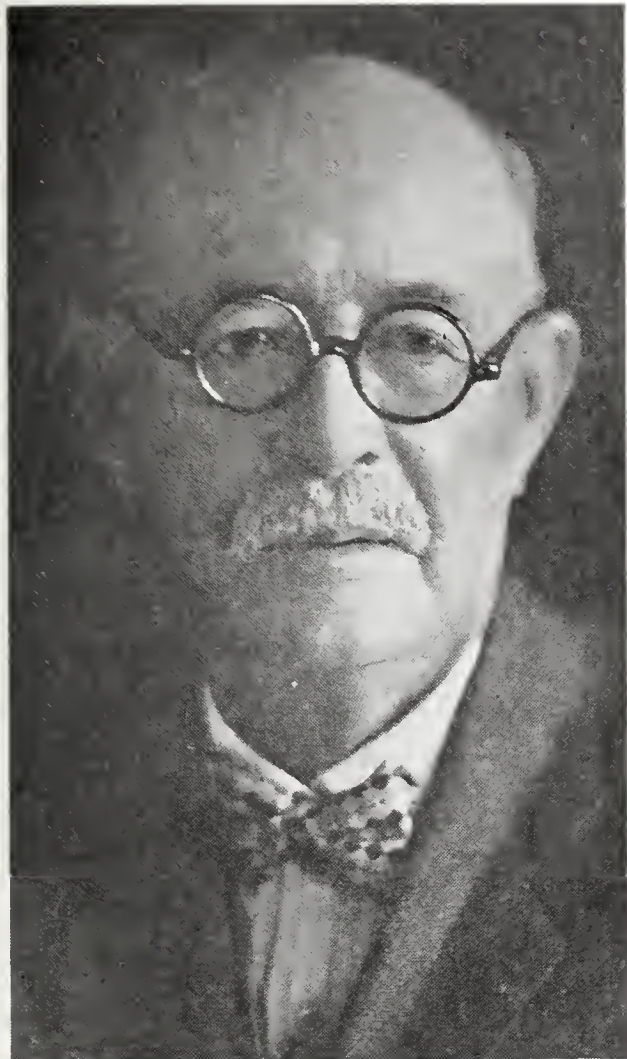
"Who can remember the indifference or open rebellion from members of our profession and from the public at large that met the demand thirty-five years ago, of Dr. Edward L. Trudeau and other pioneers for the isolation and removal from home of sufferers from tuberculosis. These sufferers as a class had previously been the recipients of lavish and intimate manifestations of family affection, with consequent shortening of the patient's

life and subsequent multiplication of similar infections among those exposed. With knowledge of good results obtained by isolation and sanatorium methods of treatment, there came, in due time, a reaction, and with public opinion behind the method, we now witness long waiting lists of early victims of tuberculosis eager to crowd the tuberculosis sanatoriums, and we all enjoy the pleasant reaction to the knowledge that the once despised method has in less than a third of a century contributed so largely to the sum of human happiness.

What, then shall be the contribution of the physicians of this day and generation to periodic health examinations as a means of further adding to the health and happiness of human beings? Shall we wait, as did a noisy minority in the days of Dr. Trudeau, for mortality experience to support the advanced ideas suggested by today's enthusiasts for life extension, or shall we aggressively aid in the battle to extend man's average span of life by postponing the development of degenerative diseases in the individual? There is no doubt as to the attitude of public opinion—it stands foursquare behind the movement, and is determined to overcome prevalent individual apathy. Medical societies have taken the lead, and perhaps the greatest contribution to be made by their individual members who will not actively enlist will be to tolerate the enthusiasm of fellow members who are determined to remain active in the spread of doctrine and practice of life extension by periodic physical examinations.

Since the time of Pasteur, the application of facts learned regarding the disease-causing organisms which invade the human body has resulted in an extraordinary extension of the average span of life in age groups under fifty-five years. May not the same studious application of facts, as learned, regarding the development of degenerative processes in living human tissue result, in the next hundred years, in the addition of many years to the present span of human life?

Do you consistently practice and teach life extension?"



FRENCH, FRANK LUCAS—Dr. F. L. French of Little Rock, died February 28, 1927. Age 66 years and five months.

Since the last issue of the Journal, death has taken still another of our valued members. Dr. French was born at Winona, Wisconsin. He had been a resident of Little Rock since he was nine years old.

He was educated in the local schools and at St. John's College, later studying medicine in the Medical Department of the University of Arkansas, graduating in 1882.

Dr. French was a member of the local and State Medical Societies. For a long time he was one of the faculty in the medical school, University of Arkansas. He practiced his profession until illness forced his retirement last December.

Dr. French is survived by his widow, a son Frank L., Jr., two step-children, Dr. Thomas H. Cates of Tucson, Arizona and Mrs. Howard H. Conley of Little Rock; two sisters, Mrs. Chas. C. Sparks and Miss Mattie French, both of Hot Springs, and by three grandchildren. Dr. French took great interest in Masonry, being a member of the Scottish Rite, a member of the Board of Trustees of the Scottish Rite bodies; was Knight Commander of the Court of Honor and had been a 33 degree Mason since 1903.

Obituary

HARRISON, FREDERICK EUGENE—Dr. F. E. Harrison of Fordyce died February 17, 1927, after a six weeks' illness. Age 55.

He was born in Cleveland County, December 24, 1871; the youngest child of Maj. M. J. Harrison and Tennie Robertson Harrison. Dr. Harrison graduated from the Kentucky School of Medicine at Louisville, Class of '94, and after practicing in Mount Holly for five years he moved to Fordyce. He enlisted in the World War, received the commission of captain and was stationed at Camp Oglethorpe.

Surviving are his wife; two children, Fred E. and Helen; two brothers and three sisters.

BRADLEY, JOHN FOSTER—Dr. J. F. Bradley died at Lamar, March 4, 1927. Age 53. He is survived by his widow, one daughter, Eugenia and one son, Jack.

Doctor, I want to urge you to attend the meetings of your Society, if you are not already doing so. The success or failure of any organization is in direct proportion to the number of members who actively participate in its activities. But you ask: "Why does he want me to do something I don't want to do, or do reluctantly?" Because, first I believe it will do you some good, and second, it will do the rest of us some good. A good audience stimulates the speaker to his best efforts, and makes him go away with a desire to do it again, and then next year we will have a better paper from him. A good audience brings forth better discussion, and sometimes some of the choicest nuggets are found in the discussion. If you wrote a paper worth presenting before this body, would you want to read it before one-fourth of the members? No, you would want all of them to hear it. I want you to come because I believe you will come again.

R. J. CALCOTE, *Secretary,*
Pulaski County Medical Society.

Book Reviews

Blood Chemistry—Colorimetric Methods. For the General Practitioner, with clinical comments and dietary suggestions. By Willard J. Stone, B. Sc., M. D., Pasadena, California. Introduction by George Dock, M. D., Pasadena, California. Second Edition Revised. Published by Paul B. Hoeber, Inc., New York City. Price \$3.25.

In this book are given the essential details of the most valuable clinical methods of biochemistry. It contains suggestions for blood chemistry work, analysis of uric acid and gives important dietary rules with a chapter on diabetes including its treatment with insulin.

Diseases of the Skin—By Richard L. Sutton, M. D., LL. D., F. R. S. (Edin). Professor of Diseases of the Skin, University of Kansas School of Medicine; Assistant Surgeon, United States Navy, Retired; Member of the American Dermatological Association. With 1,147 illustrations, and 11 colored plates. Sixth Edition, Revised and Enlarged. Published by the C. V. Mosby Company, 1926. Price \$12.00.

This energetic and enthusiastic author presents at this time a new edition of one of the world's best text books on dermatology. The book is absolutely complete in its dealings with etiology, pathology, diagnosis and treatment of diseases of the skin.

Considerable space is given to illustrations, making it particularly valuable to students and for the general practitioner.

Hay-Fever and Asthma.—A Practical Handbook for Hay-Fever and Asthma Patients. By Ray M. Balyeat, A. M., M. D., Instructor in Medicine in the University of Oklahoma Medical School; Director of the Oklahoma Asthma and Hay-Fever Clinic, Oklahoma City. With twenty-seven illustrations. Published by F. A. Davis Company, Philadelphia, 1926. Price, \$2.00.

This book explains in a general way the chief causes of asthma and hay-fever and outlines the routine part of the management of patients suffering from such diseases.

1925 Collected Papers of the Mayo Clinic, Rochester, Minn.—Octavo of 1078 pages, 252 illustrations. Published by W. B. Saunders Company, 1926. Price, cloth, \$13.00 net.

The contents of this book are divided into the following heads: Alimentary Tract, Urogenital Organs, Blood and Circulatory Organs, Skin and Syphilis, Head, Trunk and Extremities, Chest, Brain, Spine, Cord and Nerves; Technique and Miscellaneous.

One of Dr. Mayo's articles is on "The Teaching Hospital of the University of Michigan." Quoting a paragraph in this article, he says:

"A hospital which functions not only as a school for under-graduates, but also as a school for graduates in medicine, giving advanced scientific training, will enlist the best efforts of the highest type of recent graduates in medicine, and automatically give to its clientele the great advantage of a young, intelligent, and enthusiastic junior staff, who will consider the opportunity for service and for scientific observation a privilege. When their hospital service is ended, these young men will make the greatest return in caring for the sick of their respective communities, one of the rewards the citizens of the State receive for their educational efforts. The university hospital will appeal not only to the men in medicine, and improve the quality of hospital service, but it will also enlist from every walk of life the services of humanitarians interested in guarding human welfare."

The Treatment of Fractures, With Notes Upon A Few Common Dislocations.—By Charles L. Scudder, M. D., Consulting Surgeon to the Massachusetts General Hospital, formerly Assistant Professor of Surgery at the Harvard Medical School. Tenth Edition, revised. Octavo volume of 1240 pages, with 2027 illustrations. Published by W. B. Saunders Company, Philadelphia, 1926. Price, Polished Buckram, \$12.00 net.

With this new edition, the author presents the present knowledge of the non-operative and the operative methods of treating fractures. Special subjects are given by certain men chosen because of interest, training and experience.

Abt's Pediatrics.—By 150 specialists. Edited by Isaac A. Abt, M. D., Professor of Diseases of Children, Northwestern University Medical School, Chicago. Set complete in eight Octavo volumes totalling 8,000 pages with 1,500 illustrations, and separate Index Volume free. Now ready—Volume VIII, containing 1,102 pages with 388 illustrations and General Index to Volumes I to VIII. Published by W. B. Saunders Company, Philadelphia, 1926. Price, cloth, \$10.00 per volume. Sold by subscription.

This volume is composed of the following chapters: "Diseases of the Skin," "Ear Diseases in Childhood," "Ocular Diseases of Infancy," "Hospitals for Infants and Children," "Medico-Legal," "Tumors of Infancy and Childhood," "Encephalitis," "Animal Parasites."

Surgical Clinics of North America—(Issued serially, one number every other month). Volume VI, Number III (Chicago Clinic Number, August, 1926). 324 pages with 101 illustrations. Per Clinic year (February, 1926 to December, 1926). Paper, \$12.00; Cloth, \$16.00 net. Published by W. B. Saunders Company, Philadelphia.

The contents of this issue of the Surgical Clinics cover twenty-one of the surgical clinics of Chicago. Dr. Hugh McKenna, St. Josephs Hospital, presents a group of three numbers, Kohler's Disease, Intussusception and Empyema. In speaking of empyema especially regarding the relative merits in the open operation with rib resection, extensive thoracotomy and the so-called "closed" method, he describes two cases, one treated by the open method of costotomy and the other by the closed method, in which a catheter was inserted through a small thoracotomy opening.

Surgical Clinics of North America—(Issued serially, one number every other month). Volume VI, Number IV (Mayo Clinic Number, October, 1926). 274 pages with 91 illustrations. Per Clinic year (February, 1926 to December, 1926). Paper, \$12.00; Cloth, \$16.00 net. Published by W. B. Saunders Company, Philadelphia.

This number gives a large variety of cases from the Mayo Clinic. The first article is by Wm. J. Mayo and Arthur C. Johnson on "Ectopic Kidney Presenting as Pelvic Tumor; Recurring Epistaxis from Chronic Hemorrhagic Purpura; Meckel's Diverticulum." Chas. H. Mayo and Lester D. Powell describe "The Colon as a Urinary Receptacle." Verne C. Hunt's Clinic is on "Hydronephrosis. Bilocular Diverticulum of the Urinary Bladder."

Human Pathology—A Textbook. By Howard T. Karsner, M. D., Professor of Pathology, School of Medicine, Western Reserve University, Cleveland, Ohio. With an illustration by Simon Flexner, M. D., 20 illustrations in color and 443, black and white. Published by J. B. Lippincott Company, Philadelphia. Price, \$10.00.

In summary, this is a textbook of pathological anatomy and histology, related to the broader functional aspects of disease. At the beginning of each chapter the factual material is arranged in tabular form so as to give each topic its relative associations in the entire subject.

Why Every Physician in Arkansas, Who is Eligible, Should Belong to the Medical Society in His County

Membership in your County Society makes you a member of the Arkansas Medical Society.

It gives you free every month a first-class medical journal.

It gives you the privilege of joining the A. M. A. and receiving its valuable journal upon payment of five dollars annually.

It gives you the opportunity of participating in all the benefits of organized medicine.

It gives you a better chance for appointment as examiner for insurance companies and employment by industrial corporations.

It gives you the spirit of fellowship which is so much needed among doctors.

It gives you the opportunity for professional fraternity without which all doctors grow stale.

It gives you a better standing in your community.

The Secretary of the County Society will please notify the State Secretary immediately of any error or change in these officers.

DIRECTORY

OF THE

COUNTY SOCIETIES OF THE ARKANSAS

MEDICAL SOCIETY

1927

COUNTY	PRESIDENT	ADDRESS	SECRETARY	ADDRESS
ARKANSAS	S. A. Drennen	Stuttgart	J. E. Neighbors	Stuttgart
ASHLEY	W. S. Norman	Hamburg	L. C. Barnes	Hamburg
BAXTER	J. I. Thompson	Yellville	J. J. Morrow	Cotter
BENTON	F. G. Eubanks	Decatur	H. J. G. Koobs	Rogers
BOONE	G. I. Jackson	Harrison	D. L. Owens	Harrison
BRADLEY	W. T. Fike	Warren	Rufus Martin	Warren
CALHOUN	C. T. Black	Thornton	T. F. Rhine	Thornton
CARROLL	A. L. Carter	Berryville	R. H. Huntington	Eureka Springs
CHICOT	E. Baker	Dermott	B. C. Clark	Lake Village
CLARK	J. P. Bremer	Point Cedar	H. A. Ross	Arkadelphia
CLAY	A. R. Simpson	Corning	M. C. Richardson	Datto
CLEBURNE				
CLEVELAND	A. J. Hamilton	Rison	H. O. Wilson	Rison
COLUMBIA	G. F. McLeod	Magnolia	T. H. Jones	Magnolia
CONWAY	A. R. Bradley	Morrilton	W. H. Bruce	Morrilton
CRAIGHEAD	S. W. Moreland	Jonesboro	Thad Cothorn	Jonesboro
CRAWFORD	M. S. Dibrell	Van Buren	O. M. Bourland	Van Buren
CRITTENDEN	T. S. Hare	Crawfordsville	L. C. McVay	Marion
CROSS	T. J. Stewart	Wynne	Thos. Wilson	Wynne
DALLAS	H. H. Atkinson	Fordyce	J. E. M. Taylor	Sparkman
DESHA	W. H. DeClark	McGehee	W. B. Grayson	McGehee
DREW	M. Y. Pope	Monticello	A. S. J. Collins	Monticello
FAULKNER	T. C. Watson	Mt. Vernon	J. S. Westerfield	Conway
FRANKLIN	E. W. Blackburn	Ozark	Thos. Douglass	Ozark
GARLAND	J. L. Greene	Hot Springs	O. H. King	Hot Springs
GRANT	Robt. L. Paxton	Thiel	Irvin Sheppard	Sheridan
GREENE	W. J. Blackwood	Walcott	F. M. Scott	Paragould
HEMPSTEAD	Don Smith	Hope	R. L. Harris	Hope
HOT SPRING	E. T. Bramlitt	Malvern	W. G. Hodges	Malvern
HOWARD	J. S. Hopkins	Nashville	D. A. Hutchinson	Nashville
INDEPENDENCE	O. S. Woods	Salem	M. S. Craig	Batesville
JACKSON	C. R. Gray	Newport	M. L. Harris	Newport
JEFFERSON	J. T. Palmer	Pine Bluff	J. C. Beard	Pine Bluff
JOHNSON	A. L. Boen	Clarksville	E. H. Hunt	Clarksville
LAFAYETTE	D. C. Nichols	Stamps	F. W. Youmans	Lewisville
LAWRENCE	C. C. Townsend	Walnut Ridge	T. C. Guthrie	Smithville
LEE	O. L. Williamson	Marianna	W. B. Bean	Marianna
LINCOLN	J. M. McClendon	Gould	S. W. Colquitt	Grady
LITTLE RIVER	J. W. Ringgold	Ashdown	W. E. Vaughan	Richmond
LOGAN				
LONOKE	J. R. Cuning	Lonoke	Henry Thibault	Scott
MADISON	W. E. Acree	Huntsville	Fred Youngblood	Huntsville
MARION				
MILLER	H. E. Murry	Texarkana	Preston Hunt	Texarkana
MISSISSIPPI	J. L. Tidwell	Dell	F. D. Smith	Blytheville
MONROE	L. H. Stout	Brinkley	E. D. McKnight	Brinkley
MONTGOMERY	W. D. Freeman	Mount Ida	J. D. Robbins	Oden
NEVADA	W. W. Rice	Prescott	O. G. Hirst	Prescott
OUACHITA	B. V. Powell	Camden	J. B. Jameson	Camden
PERRY				
PHILLIPS	W. C. Russwurm	Helena	M. Fink	Helena
POINSETT				
POLK	C. F. Johnson	Hatfield	F. C. Mullins	Hatfield
POPE	H. V. H. Stroupe	Russellville	Wm. P. Scarlett	Russellville
PRAIRIE	Edward Adams	De Valls Bluff	J. R. Lynn	Hazen
PULASKI	Anderson Watkins	Little Rock	R. J. Calcote	Little Rock
RANDOLPH	R. R. Johnson	Walnut Ridge	H. L. Throgmorton	Pocahontas
SALINE	W. S. Davis	Owensville	J. M. Phillips	Benton
SCOTT	C. Bevil	Waldron	F. R. Duncan	Waldron
SEARCY	E. W. Wood	Marshall	Sam. G. Daniel	Marshall
SEBASTIAN	J. S. Southard	Fort Smith	C. S. Means	Fort Smith
SEVIER	B. E. Hendrix	Gillham	J. C. Graves	Lockesburg
ST. FRANCIS	A. B. Caldwell	Caldwell	J. O. Rush	Forrest City
UNION	D. E. White	El Dorado	E. J. Munn	El Dorado
WASHINGTON	C. P. Sisco	Springdale	P. L. Hathcock	Fayetteville
WHITE	T. G. Burge	Judsonia	Sam. J. Allbright	Searcy
WOODRUFF	J. W. Morris	McCrory	L. E. Biles	Augusta
YELL	H. L. Montgomery	Gravelly	C. B. Linzy	Plainview

THE JOURNAL

OF THE Arkansas Medical Society

PUBLISHED MONTHLY UNDER THE DIRECTION OF THE COUNCIL

Vol. XXIII

LITTLE ROCK, ARK., APRIL, 1927

No. 11

Original Articles

MEDICAL ACTIVITIES OF THE DEPARTMENT OF THE INTERIOR*

HON. HUBERT WORK, M. D.
Secretary of the Interior
Washington, D. C.

May I speak of the activities of the Interior Department in the field of medicine, educational and preventive, and in the application of medical and surgical relief.

The Department of the Interior is also a widespread medical activity of the Government, which carries out its health activity from the frozen fastnesses of the North, by means of a floating hospital on the Yukon River in Alaska, to the medical care and treatment of the Seminole Indians in the subtropical Everglades of Florida; from its magnificent institutions of research, education, remedial care and disease prevention on the east in Washington, D. C., to the semitropical shores of the Hawaiian Islands on the west.

Between these widely divergent points, the many and varied activities of this department, all encompassed under the general head of medicine, are almost startling in the breadth of their scope and in the means by which they are carried out. They vary from its group of massive institutions in Washington; Howard University, the national university of the negro race in America with its very complete medical college; Freedmen's Hospital, the center for the training of colored physicians of America and for the diffusion of knowledge of hygiene among the colored race of this country; Columbia Institution for the Deaf, where the most advanced methods in the education and training of deaf

children are utilized; St. Elizabeth's Hospital, where research by clinic and laboratory, where instruction and training in the problems of psychology, neurology, and pathology of mental diseases, and where studies in mental hygiene and allied subjects are given attention; to the wonderful National Park system of this country, where safeguarding the health of millions of visitors is an urgent problem; to the Geological Survey, where studies and advice on ground waters of the United States for domestic and other purposes are made; to the Bureau of Pensions, with its staff of medical examiners numbering 4,500, which provides examinations for thousands of war veterans, wherever they may be found.

The trained nurses of this department carry out their missions of mercy under the shadow of the totem pole in the far north; the field matrons, nurses, and doctors of the Indian Bureau afford relief from sickness, teach hygiene of person and sanitation of home within hearing of the incantations of the Indian medicine man. Its medicines and serums are carried by dog sled, by canoe, by aeroplane and by the ubiquitous Ford.

Comprising the Department of the Interior are six bureaus and offices, two territories, four eleemosynary institutions, a great national park system and a railroad. Of these fourteen activities of the department, twelve have in part, or very largely, very definite medical activities of some character.

Surveying briefly the many diverse medical functions of this department, we find that the Geological Survey makes investigations on ground water supplies for domestic use, for hospitals, for various States, counties, and municipalities, as well as investigations and reports upon the quality of these water supplies.

The Alaskan Railroad operates a base hospital at Anchorage, Alaska, where, during the past fiscal year, 1,200 patients were treated,

*Read before the Medical Society of Hawaii, April, 1927.

260 surgical operations were performed, and 7,973 hospital days relief given.

Our Bureau of Education makes investigations of the status of physical education and hygiene in American colleges; of educational and recreational features of summer camps; of the health of teachers of this country with reference to longevity, absence on account of illness, conditions affecting health, etc.; assists in campaigns with the National Congress of Parents and Teachers to send children to the first grade of school free from disease and physical defects. This bureau is responsible also, for medical relief to the natives of Alaska and in this work maintains six hospitals, one on the water, which cruised 2,200 miles on the Yukon River during the past season of navigation, with its eight physicians and 22 nurses. In 1926, 12,434 home visits were made among these native people, 11,147 patients were treated, 34,846 treatments were given and 6,989 days of hospital care provided.

The Bureau of Pensions has on its rolls a half million veterans of the various wars in which this country has been engaged. A large proportion of claims from these beneficiaries require physical re-examinations and a medical rating board to review such claims. This work is done by this bureau of the Interior Department. Its archives, some six millions of files, are veritable storehouses of not only valuable historical data, but genealogical and anthropological information as well.

The two territories under this department, Alaska and Hawaii, through their territorial Boards of Health carry out the usual health measures incident to the prevention and control of reportable diseases, vital statistics, sanitation, etc., to which the department has access.

The territorial Board of Health of Hawaii has a more centralized control of these activities and has to do, as you know, with sanitation, medical inspection of schools, pure food regulations, tuberculosis, leprosy, the operation of hospitals, vital statistics, etc.

The National Park Service administers 19 national parks and 32 national monuments visited by more than two and a quarter million people last year. These recreational and educational playgrounds of America, in area cover more than 15,000 square miles, almost 10,000,000 acres in extent. Safeguarding the health of the millions of visitors to these wonder lands is one of the important functions of the National Park Service, and to this end

safe water supplies, sanitary conveniences, properly controlled camping grounds, sewage facilities, mosquito control, and hospital services are provided.

The Columbia Institute for the Deaf, while primarily an educational institution, conducts studies with reference to the hearing of deaf or partially deaf pupils, and to the combining of the senses of touch and sight as aids in the understanding of speech.

Howard University—the National University for the colored race, “the capstone of negro education,” with more than 2,000 in its student body representing 37 States and 11 foreign countries, conducts schools of medicine, dentistry and pharmacy, a class “A” institution, whose graduates practice in many States and give professional attention to our colored population.

Freedmen’s Hospital, established in 1862, is now a prime factor in the training of colored physicians and in the diffusion of a knowledge of hygiene among colored people of this country. This hospital, covering an area of four city blocks in buildings and grounds, with Howard University in the background, extends its services to the indigent residents of the District of Columbia, to residents of the several States, to emergency cases, and others. During the past fiscal year, 4,431 patients were treated, 2,030 surgical operations were performed, 2,050 anaesthetics were administered, 19,262 patients received dispensary treatment, and 124,041 hospital days relief were given. This hospital also conducts a school for nursing for the benefit of the young women of the negro race, and this past year graduated 22 nurses, making a total of 423 young colored women holding nurses’ diplomas from this school.

St. Elizabeth’s Hospital, devoted to the treatment of patients from the District of Columbia, and of present and former members of the military and naval services who are suffering from mental diseases, treated 5,114 patients during the past fiscal year and gave to these patients 1,607,095 hospital days relief. Its patients were representatives of 17 races from 32 separate countries; in ages varying from under 15 years to more than 70 years, and with all variations in types and kinds of mental alienation.

St. Elizabeth’s Hospital for Government insane also conducts a strictly medical and surgical service for somatic conditions, a training school for nurses, instruction courses to

students of the Army and Navy Medical Schools, George Washington, Georgetown and Howard Universities, and in addition to its many allied clinical and laboratory facilities, carries out extensive research having to do with problems of organic lesions, the cause of, or associated with, mental diseases. Lectures on hygiene and educational problems in connection with mental disorders are also given to various welfare, parent-teacher and other organizations. The publications of this institution are of high standing in the scientific and medical world. It is an outstanding comprehensive graduate medical school.

The Indian Bureau in its medical activities extends medical and surgical care and relief to approximately 225,000 Indian wards of the Government out of a total Indian population of this country of about 350,000 persons, exclusive of Alaska. It safeguards the health, and by precept and example teaches health and sanitation to almost 65,000 Indian school children in its 207 day schools and boarding schools scattered over the Indian reservations.

Its field matrons and field nurses visit teepees, hogans, wickiups, and Indian homes of whatever character, to instruct in disease prevention, the sanitation of the home and personal hygiene. Its physicians conduct a rural practice among these Indian reservations where such Indians are unable or unwilling to accept medical care in the hospitals provided for their use. It is significant that year by year an increasing number of Indian babies are born in Indian Service hospitals.

The Indian Bureau also operates sanatoria and sanatorium schools, the former for the advanced cases of tuberculosis and the latter for the incipient cases among school children. It has a group of special physicians who travel from reservation to reservation where may be treated those suffering from trachoma, a veritable scourge among the Indian population of this country. During the fiscal year past, more than 30,000 Indian patients were treated in the 91 hospitals of this Bureau and 523,599 days of hospital relief were given. In the past two years, 36,218 Indians suffering from trachoma have been treated by surgical or medical procedure. This Bureau has more than 120 full-time field physicians, 64 part-time physicians, 10 special physicians, 7 dentists, 138 nurses and 37 field matrons engaged in this work. The Indian Medical Service has been reorganized with trained physicians assigned from the United States Public Health

Service who officer the key positions of this service.

Summarizing briefly, there are conducted under this Department more than 100 hospitals in which were provided during the past year 2,269,697 days of hospital relief; it teaches preventive medicine, extends relief, etc., to almost a quarter of a million of primitive people of this country; carries on researches into the causes of diseases of man; teaches the blind; enlightens the ignorant; safeguards the health in play and work of millions of our people in their daily life.

In these functions, it works in close co-operation with local, county, State, Federal and voluntary health organizations throughout the country, whose aid and assistance have contributed in no small part to the results so sketchily outlined here. In co-operation with other agencies, the Red Cross has provided nurses and nutrition workers; associations interested in the welfare of the Indians have provided services of various character; in States where there are large Indian populations, their health agencies have and are working in health matters affecting Indians; religious organizations, women's clubs, etc., have contributed their great part; the Veterans' Bureau and State laboratories have been made available, and the United States Public Health Service has in very large measure made available both its facilities and its personnel. Such co-operation and services are here gratefully acknowledged.

The Interior Department has been described as "the fact finding department for internal development." "A Federal University for the People;" its mission is largely educational with many of its activities devoted to the discovery and dissemination of knowledge; with a curriculum covering many fields of learning and its "faculty" including hundreds of scientists, specialists and professional men; its "student body," the people of the United States.

It is fact-finding, in that it searches out the presence of sickness, malnutrition, and unsanitary conditions and distress and poverty among the primitive peoples of this country with the purpose of curing such disease, eliminating such unsanitary conditions and relieving the distress and poverty by the application of remedial measures both with respect to disease conditions and in the building up of a better economic status among these people. Its nurses, its doctors, its matrons, its

skilled specialists are teaching preventive medicine, as well as curative medicine, to the thousands of beneficiaries of our Government through this Department.

In the Interior Department medicine has come to mean the practice of theories of health which have been proven by experience, together with the art and science of curing the sick.

THE COMMUNITY HOSPITAL AS A FACTOR IN THE PROMOTION OF SCIENTIFIC MEDICINE AND HUMAN SOCIOLOGY*

F. L. HUSBANDS, M. D. Blytheville

The philosophical brain of Hippocrates gave birth to the seed of scientific medicine twenty-four hundred years ago. Since that day medical men have not ceased to search for the true causes of disease and its cure. For years physicians were baffled as one in search of an American Indian in a virgin forest. He struggled desperately and blindly with this phantom foe. He saw his deadly effects, but could not tell from whence he came nor whither he did go, could not find his habitat, nor learn his exact *modus operandi*. Disease came like a specter in the night, like the octopus of the sea with its ever spreading feet ready to trample down the human race.

Man scaled the mountain heights, builded edifices skyward, sailed the ocean and explored its depths, discovered new lands and gave birth to new nations and made all do his bidding; but yet, the invisible foe, the true cause of disease stalked up and down the land striking consternation to its inhabitants, demolishing cities and subduing empires, taking one grinding at the mill and leaving the other, causing brother to flee from brother and husband from wife through bewilderment and fear, even when the enemy did not pursue. But just as the honest man triumphs over the thief, just as the right subdues wrong, just as the rising sun chases away the gloom of night, the unconquerable mind of man visualized the "Invisible," and now he watches the microscopic bacteria, and unmindful of danger they walk into his lasso.

Semmelweis, in 1874, seemed to be the first witness to forge a link in the chain of evi-

dence, which was destined to demonstrate bacteria in person and give man a chance to fight his enemy in the open. The evidence and means of identification were enlarged upon and made certain by Pasteur, Lister and others. These medical scientific Grand Jurymen indicted the microscopic pathogenic bacteria and convicted them of the most deadly crimes.

For about fifty years now since the practical microscopic and cultural studies of bacteria, the medical profession has been living in a brand new sunny day. In this short period of time there has been more progress than in the two thousand years before. The new science of bacteriology, blood chemistry, and the extensions and transformations in the fields of surgery all demand that doctors have a broader and more liberal literary education, a far more extensive and thorough medical course and a multiplied armamentarium with which to carry on. There is as much difference between a doctor's library and equipment now and twenty-five years ago as there is between Bob Taylor's country school curriculum, which consisted of a blue back speller and Peter Parley's Travels, and one of the most modern Carnegie libraries. Some say these are all of no use; but they are mistaken.

The eyes of the United States are turned right into Arkansas, Mississippi and Tennessee, and scientific medicine has been the greatest factor in making the investigation thorough by clearing them of yellow fever, typhoid, malaria and hookworm. Through the instrumentality of the microscope many doctors and some of the laity have been made to know that you can sleep out in the densest night air, in the slimiest pool with your head on a yellow meated watermelon, with your stomach full of September muscadines and never have a malarial chill unless you are bitten by an infected mosquito. This is stepping over a mountain of difficulty in the march of scientific medicine to have typhoid disappearing and to be relieved of some of the horrors of diphtheria is beyond description. To be relieved of yellow fever panics and to have your heart swell with pride over the accomplishments of General Gorgas is still more glorious. In reviewing the accomplishments of the medical profession for the past fifty years you might think there is not much left to do; but "we are just beginning to fight;" just beginning to accomplish the greatest

*President's Address, Tri-States Medical Association, Memphis, February 2, 1927.

things. The day of preventive medicine is really just at sunrise; and the half has not been done in the application of present day knowledge to curative medicine. There are rural sections within the borders of the Tri-States that hardly know that they are living in a new era in medicine. There are counties that do not possess an active microscope, a gas machine nor an x-ray.

This leads me to call your attention to the most important link in the extension and application of preventive and curative medicine, the Community Hospital. If time permitted, it would be interesting to trace the history of hospitals down through the ages to the present. At first they served the purpose more of an Inn, a hotel, a place where weary travelers might lay their heads and be protected from the storms and the wild beasts of the forest. In these earlier day hospitals, is perhaps where the expression, "Sleeping Four Deep" arose. They were "sardined in" several to the bed we are told, without classifying their maladies. Anyway, roughly constructed as they were they served some purpose. The nursing profession since the days of Florence Nightingale, has done its bit in hospital growth and improvement, suffice it to say that modern medicine makes hospitals a necessity, and that we could be too busy right now constructing them to spend much time reading their history. Now, why, and why not the community hospital?

The why is that the people of the small town and rural community need the benefits of modern and curative and prophylactic medicine. The cities, States and nation need for them to have it. The cities are replenished from the small town and rural district. A hospital is essential to the application of the best modern means in surgery and medicine. It has been determined by Director Dr. W. S. Rankin of the Duke Endowment Hospital Division that in a county of thirty thousand there is an average of seven hundred and fifty sick people and that seventy-five out of this number require hospitalization and that twenty-five must have aid for they are charity patients. So to give the seriously sick patient the service that he is due the benefit of the x-ray, laboratory tests, proper diet, proper housing, proper nursing and all the hospital is imperative. Imperative from a financial standpoint as well as the proper application of medical and surgical means. Country folk cannot be depended upon to sit up with their

neighbors as in the past. The bonds of pioneer friendship are not so binding. And often the neighbors are in town and staying over for the show. The home duties are more pressing, they do not have the time to spare, and they are timid, not ignorantly blissed since their neighbor on another hill has been nursed by a graduate. So, if modern medicine is to serve the people with the best that it has, facilities must be furnished in a hospital of first grade.

It is not only necessary to have a hospital in which to apply the means as they should be, but it is necessary to have hospitals in the small towns and rural communities in order for the doctors now present in these districts to be able to apply the means.

Again we refer to Dr. Rankin of the Duke Endowment and say that cities of a hundred thousand or over have an average of one doctor to every five hundred and thirty-six people and in the towns of one thousand and less there is only one to every twelve hundred and thirty-eight people. In some settlements there is only one doctor to every three thousand or more. Taking the country over, the doctor in the small town has two and one-half times the clientele as the one in the city of a hundred thousand. The doctor, who has a clientele of three thousand would have an average of seventy five sick people under his care every day, and seven and one-half new ones every day would require hospital care if they are to have the best available means of recovery. The seventy-five are all human and this does not include a number of horses, a few sick cows and an occasional dog for one of the higher ups; and does not make any allowance for rush in the winter months when the car has to be rolled in the garage, and the extra times that it takes to compound the physics, there being often times no registered pharmacist included in the population, nor registered nurse either; so there has to be time to give one of the family a short course daily in the care of the sick. Then, there might be delays, the doctor getting his medicine out that comes C. O. D. Owing to the low price of cotton he might not be able to collect enough to pay it out. So you can readily see that it is a physical impossibility for the doctors in the small town or country to treat their sick as they should be, unless they have them in a hospital. He can treat three or four times as many if they are all together in a hospital. All the sick can come to one doctor quicker and more economically than one doctor can go to

see them. Any way, the average doctor in the small town, according to the basic figures of Dr. Rankin will average thirty patients per day. This is more than he can visit.

You may say that the number of doctors can be increased in the rural communities by cutting the course and shortening the time required for graduation. It would not necessarily increase the number in the small town. The short course fellows would be the ones who would just as likely flock to the cities. If it did increase the number, it would not solve the problem. We have enough poor doctors, financially and otherwise, in the rural districts now. It takes the most thoroughly educated and versatile to cope with the situation.

The community hospital will not only enable the doctors who have to handle the situation, but it will help to hold them in the small towns, and not only this, but it will do a lot more to increase the number than lowering the standard in literary and medical requirements.

The trained nurse is a most important factor in modern day medical economics. The hospital will increase the number of nurses and help to keep them in the rural communities and small towns.

This is a day of co-operative medicine. It permits and will encourage co-operation among doctors. And not only among doctors, but between doctors, dentists, pharmacists and trained nurses. And this is becoming more imperative every day in order to give the patient the service due him and to do it economically.

The half has not been told, nor can it be in a short paper like this. But just one more thought: The era of preventive medicine is here. The job cannot be done by a traveling health man. The every day practitioner must do it. In the small town the small hospital can be of untold value.

The small town hospital is the most needed institution in the United States today. It is the enterprise of the greatest possibilities in our social and economical life. The time is ripe for action. A needy people must be awakened to their needs. The leaders of a great profession must feel the pull of responsibility. Law-making bodies must be spurred to action to lend a helping hand. The heartstrings of the philanthropist must be pulled hard enough to loosen the purse strings. The higher ups in the official kingdom of the

medical profession must be made to see that hospital efficiency does not consist of the number of beds, nor the multiplied rules written on fools cap paper. A needy people must be served above everything else. The city specialist must not be jealous of the small town hospital any more than the university is envious of the high school. You do not send a boy to college now for his high school work, nor does the high school give college degrees. The real specialist will not be hurt, but greatly benefited. The people and the firing line doctors will be awakened to the need of the specialist whose training has been thorough and adoption tried.

Just how many small town hospitals we need in the three States and their exact construction and plan of operation I shall not attempt to discuss in detail. Suffice it to say that every county of thirty thousand population should have one, and no doubt many smaller ones. This will depend largely upon the geography of the county. There will be sections perhaps that will not need more than a twenty-five bed hospital. In the real beginning of the small town hospital we should do careful planning and thinking. The American Medical Association must do its part. The law-making bodies must give their approval, and, above all, the rural communities must be shown their needs. Every doctor, dentist, nurse and pharmacist must feel an interest and take an opportunity to serve and be served. It might not be a bad plan for the State to lend some financial aid, for the county or the town in which it is located to donate thirty or more acres of land to aid in financing it and to help produce a more "endurable" diet for the patients and nurses. For the day will come when a person will not only go to the doctor for his annual or bi-ennial examination, but he will go on to the hospital to be taught what and how to eat to keep well. In plenty of hospitals now it takes a strong constitution to live through the diet. One person of very great importance should be the hospital architect. He could be a great conserver. There should be no wards in a country hospital, if you are building a new hospital from the ground up. They are just a little better than four to the bed, except to the exceptionally gregarious.

Let me repeat that the community hospital is the most necessary institution of America and has the greatest possibilities; that the multiplicity of them will come nearer being a

panacea for all our medical ailments than any other prescription that has yet been written, that they are not only the greatest aids in curative medicine, but they can and should be made the educational center for preventive medicine.

INTRAVENOUS INJECTIONS OF MERCUROCHROME*

R. H. T. MANN, M. D., F. A. C. S.
Texarkana

It is not my purpose to read you a long paper on the intravenous injection of dyes in certain forms of bacteremias, or, as perhaps is better known, septicemias. Much has been written for and against these drugs since Hugh Young wrote his first article in the *Journal of the American Medical Association* of March 1, 1924.

Perhaps the best article, which has come to my attention, was by Dr. Thibault of Scott, Arkansas, and published recently in the *Journal of the Arkansas Medical Society*.

These drugs are not a cure-all by any manner of means in every case of so-called septicemia, and when used indiscriminately the results will often be disappointing. Autopsies have shown them to be of harm in certain cases. This, however, has not been my experience. You will no doubt ask in what class of cases are these drugs applicable. Wherever it is possible the character of the infection should be determined. If the wound is draining, the pus should be examined and a blood culture should be grown in all cases. When the character of the infection has been determined, the prognosis can be given with some degree of certainty. For example, if the infection is of hemolytic streptococcal origin then you might reasonably expect some favorable results.

I am not, however, going to discuss here the action of these drugs on the various bacteria, because much has already been written upon that phase of the subject. Where, for obvious reasons, neither the pus can be examined, nor a culture grown, and the case appears to be hopeless, then it might not be amiss to use one of these drugs intravenously. If this is done occasionally a life may be saved

which otherwise would have been lost, but certainly these drugs should not be used indiscriminately except in cases of extreme necessity.

We wish here to report two cases:

Dorothy Wood, age five and one-half years, was first referred to me on March 6, 1925, by Dr. Allen of Bloomburg, Texas. This child had had enlarged glands of the throat for two years. On March 3, 1925, she developed a slight attack of scarlet fever, with pain in her ear. On March 6, I treated her for this condition. On March 13 she was brought back to my office, at which time she was suffering from a mastoid abscess; her temperature then being 104 3-5ths. A mastoid operation was performed and much pus and broken down cells were removed and the mastoid was completely cleaned out. A blood culture was grown and the infection was found to be hemolytic streptococci. There was no permanent reduction in her temperature following the mastoid operation. The next day after the operation her temperature was 104 3-5ths, the next day it was 105, and on the fourth day following the operation her temperature was 105 with distinct fluctuations. At this time a diagnosis was made of lateral sinus thrombosis. Her pulse was very weak. Realizing the seriousness of her condition at this time and the small amount of hope offered for her recovery from the ligation of the internal jugular vein, it was decided to administer mercurochrome intravenously, which was done by Dr. Hunt, of Texarkana. Within a few hours following this injection of mercurochrome her temperature went to 105 2-5ths. Her temperature then dropped, but gradually came back within two or three days to 103 2-5ths when a second injection of mercurochrome was given. A violent reaction followed this injection within eight hours, when her temperature went to 105 2-5ths where it remained for three hours, after which time it gradually dropped and did not again exceed 99 degrees. From this time on the patient made an uninterrupted recovery.

Bill Tom Didgens, age 6 years, was first seen by me on June 28, 1925, in consultation with Dr. E. L. Beck of Texarkana, giving the following history: In June, 1924, he developed a cough, and for three or four months he carried temperature. There was a vague history of him having sucked a nail down the wind pipe into the bronchus. However, he had had an x-ray made in Oklahoma, which showed

*Read at the 51st Annual Meeting of the Arkansas Medical Society, Hot Springs, May 18-20, 1926.

nothing. He had had his tonsils treated for nine months. In May he was brought to the hospital, without giving any history of the nail, and was treated for pneumonia of the right lung. He left the hospital on May 24, much improved, but still coughing.

On June 28, 1925, the child was brought back to the hospital, an x-ray was made, and a three-penny nail was found in the right bronchus between the seventh and ninth ribs. An unsuccessful effort was made to remove this nail through the larynx under a general anesthetic. The child had considerable shock following this attempt. After he had recovered from this shock and due to the involvement of the larynx a tracheotomy was performed under a local anesthetic, and the nail removed. The boy began to cough up much offensive pus in spite of the enormous amount of drainage through the tracheal wound. This boy had learned to turn over on his side, and lower his head on the side of the bed and let the pus drain out. Later a large abscess of the lung developed, and his whole right side became much distended, and his lung was aspirated by Dr. Beck from time to time and much pus removed. His infection was due to staphylococci. On July 23, 1925, his temperature was 104 3-5ths, his respiration 50 and you could hardly count his pulse. At this time he was given 6 c. c. of a 1 per cent solution of mercurochrome. The day after this injection was given the temperature went to 103 1-5th. On July 28, his temperature was 103 3-5ths, his pulse was 156 and his respiration was 56. On this day he was given 6 c. c. of a 1 per cent solution of mercurochrome. Immediately following this injection his temperature went to 104, his pulse 152 and his respiration 46. On August 3, his temperature was 104, his pulse was 166 and his respiration 48. At this time he was given 9 c. c. of a 1 per cent solution of mercurochrome. Following this injection his temperature was 103 3-5ths, and from this time on his temperature went down and did not exceed 101 at any time. The patient left the hospital on August 16. His side was still draining, which has since closed, and he has been attending school all winter, although at times, after taking cold, he has a cough.

DISCUSSION

DR. E. L. BECK, Texarkana: The program was a little misleading. I had no part in the essay. I was only asked to discuss the last case Dr. Mann reported, which happened to be my case. This case was extremely interesting to me and

perhaps to everyone who saw it, first, because of the length of time of the presence of this nail, which was 13 months, if I remember correctly, from the time the nail entered the boy's bronchial tube until it was located. At first, they were not sure, as I understand from the family, of his having this nail. Some 11 or 12 months thereafter after the trouble outlined by Dr. Mann, the boy developed some acute trouble and was brought down for treatment. They didn't think of the nail at the time, they didn't report the nail because they thought that had been excluded on account of the x-ray made at the time. Later he was returned with a more careful investigation and with the history of this nail, and on x-ray we found the nail.

I want to say that, first of all, this boy was in a very feeble or critical condition. His condition was very bad. And I want to say that it was due largely to two things, first, to our excellent anesthesiologist, Dr. Klein, who so carefully handled him with the anesthetic, and, second, to Dr. Mann's skillful technique in removing that nail, that we saved his life. I am of the opinion we had considerable pus there from the very beginning, even before the doctor did a tracheotomy on him.

Coming up to the point that he would like to have me discuss, the question of mercurochrome, I don't know just what to say about it. I have come to believe in it as a therapeutic agent. I think it has some place.

In this particular case, we were draining this boy, and we aspirated him. We found we couldn't keep that up and inserted the tube into the lung and it was retained there for many weeks thereafter, with the escaping of a large amount of pus every day. We discussed the mercurochrome several days before administering it, but on account of the reaction we thought would take place, we gave it in very small quantities, and with quite a bit of reaction. We were afraid to push it on him. I don't know how much reaction he could stand.

Sometime ago we had a case of pyelitis in the hospital, a very desperate case. The doctor administered some mercurochrome to her one afternoon. I don't know what time nor the amount. In the night the night superintendent called him up and said, "Doctor, your kidney patient has developed a very severe chill and temperature of"—I don't know how much, maybe 106. The doctor said, "Good. I think we are getting some results." She said, "I think you are mistaken, doctor. I think we have already gotten results."

I think it is due to the doctor's skill in removing the nail that saved the life of one of the most intelligent patients it has ever been my privilege to know in the person of this little boy. He is living and promises to be well. Mercurochrome in small doses may be all right, but don't fail to drain wherever possible.

DR. H. THIBAUT, Scott: I think we owe a vote of thanks to Dr. Beck for reporting that kidney case. It is very hard to judge the value of a drug when we are so particular to report only the successful cases treated with it.

In order to make the subject 50-50, I would like to report a case of streptococcal infection of the cellular tissue in the back, which was treated with mercurochrome and died.

In order to show that some cases might get well without mercurochrome, I would like to report a case with the same type of streptococcus where the infection took place on the anterior part of the thigh. It was treated by incision and salt solution and got well. Dr. Ward, of England, reports that he got well and didn't have any

mercurochrome. This case was so desperately ill that Dr. Ward hesitated even to open the abscess under local anesthesia, and, if we had given two drops of mercurochrome we would have been ready to report a most brilliant result.

I would like to ask Dr. Mann if these two cases were the only cases of septicemia that he ever treated with mercurochrome. If they are not, it is his duty to the profession, in order to give them an opportunity to estimate the value of this drug, to report also other cases that he has treated or has noted in his practice.

As I stated last year when there was a discussion as to the value of chlorine in the treatment of respiratory infections that the only way we could evaluate any remedy was to have an equal number of cases equally severe and untreated to compare with those that we treated.

Now, these certain brilliant results are just as usual in cases that are treated simply by removing the focus of the infection, so long as you are able to support the patient by good nursing, as they are with mercurochrome. That takes place whether he gives mercurochrome or not. Dr. Mann's charts show that this patient didn't get any benefit from the mercurochrome. The mercurochrome remained in the circulation not over seven hours, and he didn't get any depression of temperature until long after that mercurochrome was absolutely eliminated from the circulation of the patient. Therefore, what benefit they got clinically was not due to the drug that was circulating in the blood. If the focus of infection is left active, if the drug absolutely destroys for the time being every bug or every bacteria in the circulating blood, when that drug went out of the blood and the focus of infection again discharges its quota of bacteria into the circulation, our patient would be just as sick, as he was before we gave it.

Dr. Hoge's paper this morning was one that opened up a point that we ought to take into consideration. We open an empyema and our patient still has fever. We think that we have removed the focus of infection when we have removed only one of many foci. I had a patient not long ago that had temperature after drainage of an empyema, but when he was put into the ambulance to take him to the hospital, the adhesions that had pocketed off some of the pus that wasn't removed, the second focus of infection, ruptured into the original cavity and it drained on the way to the hospital, and his temperature went to normal. If he had gotten a dose of mercurochrome, before he went into the ambulance, he would have been reported as another brilliant triumph for that drug.

Now, we must bear this thing in mind that, removing one focus of infection in a mastoid and leaving one, and one viewing the field of operation within 24 or 48 hours it may be ruptured into our already discharging wound of operation and relieve the patient, regardless of whether he gets mercurochrome or not.

The time is too short to go into a detailed discussion of the physiology of drugs injected into the circulation, but these are simple facts that a man ought to bear in mind when he is evaluating drugs, and I believe it is wrong to come before a medical society and spread on the minutes a record of all the successful cases you treat with drugs and leave those fatal cases of pyelitis out. (Applause).

DR. MANN (closing): It is a well-known fact that bacteria do not live long within the blood stream. It is also probably a fact that either now,

or some time in the future, a drug may be discovered which, when injected into the blood stream while it may not completely disinfect the blood stream, so to speak, it may sufficiently disinfect it so as to enable the resistance of the patient to win the fight. In other words, if the drug does not destroy all of the bacteria within the blood stream, it may destroy enough bacteria so that the condition of the patient himself will be able to overcome a disease to which he might otherwise succumb.

I have used mercurochrome in five or six cases, and so far have only had one death. The reason I did not report all of these cases at this time was that they had been reported before. I am not advertising, nor advocating, this drug as a cure-all. I am simply showing the results of these cases as they come along. I am not taking one or the other, nor reporting the successful cases and letting the others go. I am reporting them as they come, leaving it to members of the medical profession to decide for themselves.

I do know about these two cases that they were both very desperately sick patients, and I know that the little girl had a lateral sinus thrombosis, which we all know, in the last stages, has a very high mortality, and the only thing I can say about these cases, whether by mercurochrome, or Nature or in some other way, they are both well.

A BETTER TONSIL NEEDLE

By PAUL L. MAHONEY, M. D., F. A. C. S.

Little Rock



The new needle that I am presenting to the profession is round non-cutting with double or cork-screw curve, on a straight handle.

The first curve is long and sweeping at a very oblique angle. The second curve is a half circle, one-half inch radius, in a plane tilted at about 45 degrees from the plane of the first curve. This needle facilitates the insertion of a stitch at any angle in the throat and, while they are made in pairs for right and left side, it is possible to suture either side with one needle. The eye of the needle is made small inasmuch as O or OO catgut is usually sufficient. This needle has the advantage of being non-cut-

ing, small and easily inserted with cork-screw motion. A suture in the adenoid region is possible with this needle.

THE JOURNAL

OF THE

ARKANSAS MEDICAL SOCIETY

Owned by the Arkansas Medical Society and Published under the direction of the Council.

WILLIAM R. BATHURST, Editor
810-812 Boyle Building, Little Rock, Arkansas.

Published Monthly. Subscription \$3.00 per year; single copies 25 cents.

Entered as second-class matter, June 21, 1906, at the postoffice at Little Rock, Arkansas, under the Act of Congress of March 3, 1879.

Acceptance for mailing at special rate of postage provided for in Section 1103, Act of October 3, 1917, authorized August 1, 1918.

The advertising policy of this Journal is governed by the rules of the Council on Pharmacy and Chemistry of the American Medical Association.

All communications of this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the State. Notice of deaths, removals from the state, changes of location, etc., are requested.

OFFICERS OF THE ARKANSAS MEDICAL SOCIETY

J. M. LEMONS, President.....	Pine Bluff
HENRY THIBAUT, President-Elect.....	Scott
G. E. TARKINGTON, First Vice-President.....	Hot Springs
T. F. KITTRELL, Second Vice-President.....	Texarkana
J. H. FOWLER, Third Vice-President.....	Harrison
R. J. CALCOTE, Treasurer.....	Little Rock
WM. R. BATHURST, Secretary.....	Little Rock

COUNCILORS

First District—THAD COTHERN.....	Jonesboro
Second District—J. L. JONES.....	Searcy
Third District—M. C. JOHN.....	Stuttgart
Fourth District—W. T. LOWE.....	Pine Bluff
Fifth District—W. P. COOKSEY.....	Magnolia
Sixth District—B. C. MIDDLETON.....	Texarkana
Seventh District—DEWELL GANN, SR.....	Benton
Eighth District—ANDERSON WATKINS.....	Little Rock
Ninth District—SAM G. DANIEL.....	Marshall
Tenth District—THOMAS DOUGLASS.....	Ozark

COMMITTEES

SCIENTIFIC PROGRAM—R. J. Calcote, Little Rock, chairman; A. S. Buchanan, Prescott; R. H. T. Mann, Texarkana.

SCIENTIFIC EXHIBIT—C. E. Oates, Little Rock, Chairman; Homer Scott, Little Rock; D. E. White, El Dorado.

MEDICAL LEGISLATION—Earle H. Hunt, Clarksville, chairman; J. W. Walker, Fayetteville; Thad Cothern, Jonesboro.

STUDENT LOAN FUND—E. F. Ellis, Fayetteville, chairman; J. H. Lenow, Little Rock; Wm. R. Bathurst, Little Rock; G. A. Warren, Black Rock.

NECROLOGY—Cowley S. Pettus, Little Rock, Chairman; F. B. Kirby, Harrison; E. E. Barlow, Dermott.

HEALTH AND PUBLIC INSTRUCTION—C. W. Garrison, Little Rock, chairman; F. Michael Smith, Pine Bluff; M. E. McCaskill, Little Rock; President and Secretary of State Society.

CANCER CONTROL—Dewell Gann, Jr., Little Rock, chairman; John S. Jenkins, Pine Bluff; J. C. Hughes, Hoxie.

INFANT WELFARE—A. C. Kirby, Little Rock, chairman; N. D. McCormack, Ft. Smith; H. W. Browning, Little Rock.

HOSPITALS—J. D. Southard, Fort Smith, chairman; D. A. Rhinehart, Little Rock; J. T. Palmer, Pine Bluff.

Editorials

OUR ANNUAL MEETING

There is every reason to believe that the fifty-second Annual Meeting of the Arkansas Medical Society, scheduled to convene May 11, for three days at the New Capitol Hotel, Little Rock, will be one of the best ever held. It has been suggested that the convention be known as "Members Meeting," and with the place located in the Capitol of the State, the most central city in the State, and the most easily reached by rail or highways, the attendance should break all records. It is expected that this meeting will be a regular genuine re-union of physicians from all parts of the State.

A splendid program has been provided both in the scientific program and in social entertainment. The physicians of Little Rock and their wives are preparing a wonderful program, and there promises to be not a dull hour in the three days from May 11 to 13 inclusive. Knowing these factors, we feel sure of a big attendance and are ready to guarantee a profitable time to all who attend. It only remains for the entire membership to show that co-operative spirit which will encourage the efforts of those who have unselfishly devoted their time and talents to insure a pleasant visit to all and which will cause the annual meeting of 1927 to long dwell pleasantly in the memory.

Not only have prominent physicians agreed to speak, but the commercial exhibits will be more numerous and of the highest grade. They have been carefully selected and only the strictly ethical concerns will be represented.

The program, with possibly some minor changes, will be found in this issue of the Journal. One of the features will be the Public Session at which the principal address will be made by Dr. Rosser of Dallas, Texas, a physician who has the rather unusual faculty of presenting the medical point of view so shorn of technical terms and in such language that the layman can not only understand without referring to a dictionary, but which will actually prove entertaining as well as educational.

Read the program, then ask yourself, "Can I afford to miss this meeting?" None of us knows it all. It is only the incompetent physician who thinks he does. The wise physician

knows full well that, regardless of the words of Solomon "There is no new thing under the sun," new things constantly are being introduced into the science of medicine; important discoveries are being made; new applications of old ideas perhaps, new scrums are being experimentally tested and not a year passes but some new theory or fact is developed. The entire field of medicine is not an exact science. This generation has come to know that even some of the greatest men in the profession in past generations were mistaken in many cases, both in diagnosis and treatment. Hence we have diseases today, for example Tularemia, which existed for a long period of time unrecognized and untreated as such. Wherefore, no earnest practitioner will claim to be a "know-it-all" nor will be unwilling to learn more. It is at medical conventions that all that is late and worth while can be learned.

We hope to see every member of the society who is not sick abed with us in Little Rock on May 11, ready for the opening session.

To the Officers of the County Auxiliaries of the Arkansas Medical Society:

If you are to be an auxiliary to the Arkansas Medical Society you must assist in the solving of public problems. If you are to be effective in this work of educating the public in health matters, you should first educate yourselves. The following outline is suggested for study:

1. Community wide conditions which affect health.

(a) Operation of all health laws, as endorsed by the State Board of Health. Institute activities for the elimination of diphtheria, immunizing all the children. Advocate anti-rabic inoculation of all the dogs.

(b) The distribution to the laity of our health magazine, HYGEIA, published by the American Medical Association.

2. Milk—Milk standards, why necessary, and what milk standard your community needs. How are those needs being met?

3. General sanitation and its relation to the death and morbidity rate. Sewage disposal, water, garbage, flies, street cleaning, etc.

4. Health Promotion. (a) Prenatal Care. (b) Child Welfare. Infant and pre-school Hygiene. This should include medical examination by the family physician previous to

school entrance and correction of remediable physical defects.

5. Secure public speakers on these subjects for civic club meetings.

6. A study of the medical history of Arkansas.

AND STILL WE GROW

Two years ago we had the gratification of reporting a larger number of members than at anytime in the history of the Arkansas Medical Society. That was on the occasion of the fiftieth anniversary year of the organization of the society. Last year at Hot Springs the secretary had the pleasure of announcing a larger number than ever before. And now another year has rolled around and again the report to be read at the meeting next month will show a further increase, with a total of 1,226 members—again the largest on record. Membership December 31, 1924, was 1,141; membership December 31, 1925, was 1,182. numbers mean power and our aim is to continue to grow until every eligible physician in Arkansas is a member. The bigger we grow the more desirable membership becomes, and the less can the physician afford to stand aloof. Together with the membership report will be the financial statement which shows a very healthy condition.

Another matter very distinctively favorable is the progress made in the Journal. In addition to more pages of reading matter we have had a larger volume of advertising in the past fiscal year. The income from this source is more than ever before in its history. The more members we have the greater the circulation; the greater the circulation, the more valuable the Journal becomes to the advertiser and the higher rate he is willing to pay.

In this connection, permit the editor again to suggest that in every case in which a member inquires for further information or orders anything advertised in the Journal, he give the name of the Journal with his order. Only by that means will the advertiser know he is getting direct results and the more certainly he will continue to advertise with us.

Editorial Clippings

SAFEGUARD THE HOSPITAL STAFFS

The tremendous increase in medical knowledge during the last few decades has revolutionized the methods of dealing with disease.

Many of the new methods are of great benefit to mankind, but may also be dangerous, depending on whether they are employed by skilled or unskilled practitioners. Twenty-five years ago most graduates of medical schools entered immediately on the practice of medicine without instruction in the actual care of patients such as they now obtain during the last two years of their medical course and the one or more years of intern training. That accidents or serious results from inexperience seldom occurred was largely due to the fact that such technical and dangerous methods of treatment as are now commonly employed had not come into general use. Serums, antitoxins, insulin and other like preparations, as well as the roentgen-ray or radium, which are now being extensively used, had not been developed. To use these modern helps in medical practice requires, more than ever before, that physicians or others using them shall not only have obtained a complete training in the sciences fundamental to medicine but also, by means of clinics in dispensaries and hospitals, have developed skill in examining patients, in making accurate diagnoses, and in applying the particular form of treatment in each case which the condition of the patient indicates. Partly because of these many valuable helps in combating disease, hospitals have become more essential in the practice of medicine. Hospitals have now reached a higher standard of development than ever before attained, but there are still further heights to which they may climb in their service to humanity. This further progress depends more on the intelligence, skill and high ideals of the physicians on the attending staff than on all other factors combined. It is of first importance, therefore, in the future of hospitals in this country, that no influence, either from within or without, shall be permitted to interfere with the high educational and moral standard by which hospital staffs are so generally selected. Hospital directors or trustees are morally, if not legally, responsible for the maintenance of such staffs, a responsibility that has been recognized by the courts in every instance in which their right to remove from or to refuse admission to the staff has been questioned.—Journal A. M. A., March 12, 1927.

Abstracts

CARE OF PATIENT

Francis W. Peabody, Boston (Journal A. M. A., March 19, 1927), says that the most common criticism made at present by older practitioners is that young graduates have been taught a great deal about the mechanism of disease, but very little about the practice of medicine—or, to put it more bluntly, they are too “scientific” and do not know how to take care of patients. The indictment is concurred in by numerous recent graduates, who find that in the actual practice of medicine they encounter many situations which they had not been led to anticipate and which they are not prepared to meet effectively. To begin with, Peabody continues, the fact must be accepted that one cannot expect to become a skillful practitioner of medicine in the four or five years allotted to the medical curriculum. All that the medical school can hope to do is to supply the foundations on which to build. The practice of medicine in its broadest sense includes the whole relationship of the physician with his patient. It is an art, based to an increasing extent on the medical sciences, but comprising much that still remains outside the realm of any science. Good practice presupposes an understanding of the sciences which contribute to the structure of modern medicine, but it is obvious that sound professional training should include a much broader equipment. The teacher who is attempting to train medical students is immediately confronted by the fact that, even if he would, he cannot make the conditions under which he has to teach clinical medicine exactly similar to those of actual practice. The primary difficulty is that instruction has to be carried out largely in the wards and dispensaries of hospitals rather than in the patient’s home and the physician’s office. Now the essence of the practice of medicine is that it is an intensely personal matter, and one of the chief differences between private practice and hospital practice is that the latter always tends to become impersonal. At first sight this may not appear to be a very vital point, but it is, as a matter of fact, the crux of the whole situation. The treatment of a disease may be entirely impersonal; the care of a patient must be completely personal. The significance of the intimate personal relationship between physician and patient cannot be too strongly emphasized, for in an extraordinary large number of cases both diag-

nosis and treatment are directly dependent on it, and the failure of the young physician to establish this relationship accounts for much of his ineffectiveness in the care of patients. Hospitals, like other institutions founded with the highest human ideals, are apt to deteriorate into dehumanized machines, and even the physician who has the patient's welfare most at heart finds that pressure of work forces him to give most of his attention to the critically sick and to those whose diseases are a menace to the public health. In such cases he must first treat the specific disease, and there then remains little time in which to cultivate more than a superficial personal contact with the patients. Moreover, the circumstances under which the physician sees the patient are not wholly favorable to the establishment of the intimate personal relationship that exists in private practice, for one of the outstanding features of hospitalization is that it completely removes the patient from his accustomed environment. When the general practitioner goes into the home of a patient, he may know the whole background of the family life from past experience; but even when he comes as a stranger he has every opportunity to find out what manner of man his patient is, and what kind of circumstances make his life. He gets a hint of financial anxiety or of domestic incompatibility; he may find himself confronted by a querulous, exacting, self-centered patient, or by a gentle invalid overawed by a dominating family; and as he appreciates how these circumstances are reacting on the patient he dispenses sympathy, encouragement or discipline. What is spoken of as a "clinical picture" is not just a photograph of a man sick in bed; it is an impressionistic painting of the patient surrounded by his home, his work, his relations, his friends, his joys, sorrows, hopes and fears. When a patient enters a hospital, one of the first things that commonly happens to him is that he loses his personal identity. He is generally referred to, not as Henry Jones, but as "that case of mitral stenosis in the second bed on the left." The disease is treated, but Henry Jones, lying awake nights while he worries about his wife and children, represents a problem that is much more complex than the pathologic physiology of mitral stenosis, and he is apt to improve very slowly unless a discerning intern happens to discover why it is that even large doses of digitalis fail to slow his heart rate. Henry happens to have heart disease, but he

is not disturbed so much by dyspnea as he is by anxiety for the future, and a talk with an understanding physician who tries to make the situation clear to him, and then gets the social service worker to find a suitable occupation, does more to straighten him out than a book full of drugs and diets. But if teachers and students are liable to take a limited point of view even toward interesting cases of organic disease, they fall into much more serious error in their attitude toward a large group of patients who do not show objective, organic pathologic conditions, and who are generally spoken of as having "nothing the matter with them." Up to a certain point, as long as they are regarded as diagnostic problems, they command attention; but as soon as a physician has assured himself that they do not have organic disease, he passes them over lightly. Take the case of a young woman, for instance, who entered the hospital with a history of nausea and discomfort in the upper part of the abdomen after eating. Mrs. Brown had "suffered many things of many physicians." Each of them gave her a tonic and limited her diet. She stopped eating everything that any of her physicians advised her to omit, and is now living on a little milk with a few crackers; but her symptoms persist. All diagnostic methods give negative results; that is, they do not show evidence of any structural change. The case is immediately much less interesting than if it had turned out to be a gastric ulcer with atypical symptoms. The visiting physician walks by and says "Well, there's nothing the matter with her." The clinical clerk says "I did an awful lot of work on that case and it turned out to be nothing at all." The intern, who wants to clear out the ward so as to make room for some interesting cases, says "Mrs. Brown, you can send for your clothes and go home tomorrow. There really is nothing the matter with you, and fortunately you have not got any of the serious troubles we suspected." Mrs. Brown goes home, somewhat better for her rest in new surroundings, thinking that nurses are kind and physicians are pleasant, but that they do not seem to know much about the sort of medicine that will touch her trouble. She takes up her life and the symptoms return—and then she tries chiropractic, or perhaps it is Christian science. A good many "Mrs. Browns," male and female, come to hospitals, and a great many more go to private physicians. They are all characterized by the pres-

ence of symptoms that cannot be accounted for by organic disease, and they are all liable to be told that they have "nothing the matter" with them. Numerically, then, these patients constitute a large group, and their fees go a long way toward spreading butter on the physician's bread. Medically speaking, they are not serious cases as regards prospective death, but they are often extremely serious as regards prospective life. Their symptoms will rarely prove fatal, but their lives will be long and miserable, and they may end by nearly exhausting their families and friends. Death is not the worst thing in the world, and to help a man to a happy and useful career may be more of a service than the saving of life. Technically, most of these patients come under the broad heading of the "psychoneuroses;" but for practical purposes many of them may be regarded as patients whose subjective symptoms are due to disturbances of the physiologic activity of one or more organs or symptoms. The ultimate causes of these disturbances are to be found, not in any gross structural changes in the organs involved, but rather in nervous influences emanating from the emotional or intellectual life, which, directly or indirectly, affect in one way or another organs that are under either voluntary or involuntary control. The symptoms, although obviously not due to anatomic changes, may, nevertheless, be very disturbing and distressing, and there is nothing imaginary about them. The physician who does take these cases seriously—one might say scientifically—has the great satisfaction of seeing some of his patients get well, not as the result of drugs or as the result of the disease having run its course, but as the result of his own individual efforts. Here then, is a great group of patients in which it is not the disease but the man or the woman who needs to be treated. In general hospital practice physicians are so busy with the critically sick, and in clinical teaching are so concerned with training students in physical diagnosis and attempting to show them all the types of organic disease, that they do not pay as much attention as they should to the functional disorders. Many a student enters practice having hardly heard of them except in his course in psychiatry, and without the faintest conception of how large a part they will play in his future practice. At best, his method of treatment is apt to be a cheerful reassurance com-

bined with a placebo. The successful diagnosis and treatment of these patients, however, depends almost wholly on the establishment of that intimate personal contact between physician and patient which forms the basis of private practice. If students are to obtain any insight into this field of medicine, they must also be given opportunities to build up the same type of personal relationship with their patients. If the establishment of an intimate personal relationship is necessary in the diagnosis of functional disturbances, it becomes doubly necessary in their treatment. Unless there is complete confidence in the sympathetic understanding of the physician as well as in his professional skill, very little can be accomplished. The hospital has, indeed, the advantage that the entire reputation of the institution, and all that it represents in the way of facilities for diagnosis and treatment, go to enhance the confidence which the patient has in the individual physician who represents it. This gives the very young physician a hold on his patients that he could scarcely hope to have without its support. Another advantage is that hospital patients are removed from their usual environment; for the treatment of functional disturbances is often easier when patients are away from friends, relatives, home, work and, indeed, everything that is associated with their daily life. It is true that in a public ward one cannot obtain complete isolation in the sense that this is a part of the Weir Mitchell treatment, but the main object is accomplished if one has obtained the psychologic effect of isolation which comes with an entirely new and unaccustomed atmosphere. Disease in man is never exactly the same as disease in an experimental animal, for in man the disease at once affects and is affected by what we call the emotional life. Thus, the physician who attempts to take care of a patient while he neglects this factor is as unscientific as the investigator who neglects to control all the conditions that may affect his experiment. The good physician knows his patients through and through, and his knowledge is bought dearly. Time, sympathy and understanding must be lavishly dispensed, but the reward is to be found in that personal bond which forms the greatest satisfaction of the practice of medicine. One of the essential qualities of the clinician is interest in humanity, for the secret of the care of the patient is in caring for the patient.

Personal and News Items

Mrs. Riggan of Birmingham, Alabama, will represent the Southern Medical Association at the annual meeting of the Arkansas Medical Society, May 11, 12, and 13, at Little Rock.

The Arkansas Tuberculosis Association held its annual meeting in Little Rock, March 31.

Dr. T. Z. Johnson of Walnut Ridge has moved to Pocahontas, and is occupying the office of Dr. H. L. Throgmorton, deceased.

WANTED—Salaried appointments for Class A physicians in all branches of the medical profession. Let us put you in touch with the best man for your opening. Our nation-wide connections enable us to give superior service. Aznoe's National Physicians' Exchange, 30 North Michigan, Chicago. Established 1896. Member the Chicago Association of Commerce.—(Adv.)

Dr. L. R. Brown, superintendent of the State Hospital for Nervous Diseases, was appointed to succeed himself for a term of four years at a meeting March 21 of the State Board of Charities and Corrections. Other appointments were: Dr. E. T. Ponder, Little Rock, physician at the State Farm for Women; Dr. J. C. Cunningham, Little Rock, physician at the Girls' Training School near Alexander, and Dr. S. W. Colquitt, Grady, physician at the Boys' Industrial School at Pine Bluff.

Dr. J. R. Linzy, former physician at the Arkansas Confederate Home, has opened an office at 723 Main Street, North Little Rock. He resigned his place at the Confederate Home January 1, and since has been away taking post-graduate course. Dr. Linzy is State Medical Director of the Modern Woodmen of America.

Counties that have never organized a medical society in Arkansas, include: Fulton, Izard, Sharp, Pike, Newton, Stone, Van Buren and Poinsett.

Congress passed the Federal Caustic Poison Bill, March 2, and the President signed it on the following day. It is now a law. Thus after years of agitation by the American Medical Association there is a federal law that requires household packages of lye, ammonia, carbolic acid, oxalic acid, and other caustic substances named in the law to be distinctly labeled "Poison," with instructions as to emergency treatment in case of accident.

Dr. E. L. Terrell has moved from Stamps to Shawnee, Okla.

Dr. Nina V. Hardin has moved from near Van Buren to Fayetteville.

Dr. S. W. Colquitt has moved from Grady to Pine Bluff.

Dr. M. P. McNeil has moved from Tawaoe, Colorado to Owyhee, Nevada.

Dr. F. M. Cooper has moved from Little Rock to Oklahoma City, Okla.

Dr. H. F. Crawford has moved from Wilson, Ark. to Memphis, Tenn.

Dr. J. B. Stueart has moved from Womble to Norman.

Dr. E. L. Thompson has moved from El Dorado to Hot Springs.

Dr. O. C. Butler has moved from England to Seminole, Okla.

Dr. W. T. McRea has moved from Louann to Pan Handle, Texas.

Dr. C. M. Brooks, formerly of the Pulaski County Hospital has been appointed Superintendent of the General Hospital, Little Rock.

FOR SALE—Small drug stock and furnishings for two office rooms. Practice now paying \$3,500, which can be increased to twice this amount. For quick sale, will sacrifice for \$400.00. Terms, \$100.00 down and balance \$50.00 a month. Address, S. W. Colquitt, M. D., Grady, Arkansas.—(Adv.)

**FORGET THE TRIALS YOU
HAVE HAD,**

**FORGET THE WEATHER IF
IT'S BAD;**

**FORGET YOU ARE NOT A
MILLIONAIRE,**

**FORGET THE GREY STREAKS
IN YOUR HAIR;**

**FORGET YOU EVER HAD THE
BLUES,**

**BUT DON'T FORGET TO PAY
YOUR DUES!**

Announcements and Program

Fifty-second Annual Session

of the

ARKANSAS MEDICAL SOCIETY

LITTLE ROCK, ARKANSAS

MAY 11, 12, 13, 1927

OFFICERS

President—J. M. Lemons, Pine Bluff.

President-Elect—Henry Thibault, Scott.

First Vice-President—G. E. Tarkington, Hot Springs.

Second Vice-President—T. F. Kittrell, Texarkana.

Third Vice-President—J. H. Fowler, Harrison.

Secretary—William R. Bathurst, Little Rock.

Treasurer—R. J. Calcote, Little Rock.

COUNCILORS AND COUNCILOR DISTRICTS

First District—Clay, Crittenden, Craighead, Greene, Lawrence, Mississippi, Poinsett and Randolph Counties. Councilor, Thad Cothorn, Jonesboro. Term of office expires 1927.

Second District—Cleburne, Fulton, Independence, Izard, Jackson, Sharp and White Counties. Councilor, J. L. Jones, Searcy. Term of office expires 1928.

Third District—Arkansas, Cross, Lee, Lonoke, Monroe, Phillips, Prairie, St. Francis and Woodruff Counties. Councilor, M. C. John, Stuttgart. Term of office expires 1927.

Fourth District—Ashley, Bradley, Chicot, Cleveland, Drew, Desha, Jefferson and Lincoln Counties. Councilor, W. T. Lowe, Pine Bluff. Term of office expires 1928.

Fifth District—Calhoun, Columbia, Dallas, LaFayette, Ouachita and Union Counties. Councilor, W. P. Cooksey, Magnolia. Term of office expires 1927.

Sixth District—Hempstead, Howard, Little River, Miller, Nevada, Pike, Polk and Sevier Counties. Councilor, B. C. Middleton, Texarkana. Term of office expires 1928.

Seventh District—Clark, Garland, Grant, Hot Spring, Montgomery, Saline and Scott Counties. Councilor, Dewell Gann, Sr., Benton. Term of office expires 1927.

Eighth District—Conway, Faulkner, Johnson, Perry, Pope, Pulaski and Yell Counties. Councilor, Anderson Watkins, Little Rock. Term of office expires 1928.

Ninth District—Baxter, Boone, Carroll, Marion, Newton, Searcy, Stone and Van Buren Counties. Councilor, Sam G. Daniel, Marshall. Term of office expires 1927.

Tenth District—Benton, Crawford, Franklin, Logan, Madison, Sebastian and Washington Counties. Councilor, Thomas Douglass, Ozark. Term of office expires 1928.

Delegates to the A. M. A.—William R. Bathurst, Little Rock (1929); H. D. Wood, Fayetteville (1928).

COMMITTEES

SCIENTIFIC PROGRAM

R. J. Calcote, Little Rock, Chairman; A. S. Buchanan, Prescott; R. H. T. Mann, Texarkana.

SCIENTIFIC EXHIBIT

C. E. Oates, Little Rock, Chairman; Homer Scott, Little Rock; D. E. White, El Dorado.

MEDICAL LEGISLATION

Earle H. Hunt, Clarksville, Chairman; J. W. Walker, Fayetteville; Thad Cothorn, Jonesboro.

STUDENT LOAN FUND

E. F. Ellis, Fayetteville, Chairman; J. H. Lenow, Little Rock; G. A. Warren, Black Rock; Wm. R. Bathurst, Little Rock.

NECROLOGY

Cowley S. Pettus, Little Rock, Chairman; F. B. Kirby, Harrison; E. E. Barlow, Dermott.

HEALTH AND PUBLIC INSTRUCTION

C. W. Garrison, Little Rock, Chairman; F. Michael Smith, Pine Bluff; M. E. McCaskill, Little Rock; President and Secretary of State Society.

CANCER CONTROL

Dewell Gann, Jr., Little Rock, Chairman; John S. Jenkins, Pine Bluff; J. C. Hughes, Hoxie.

INFANT WELFARE

A. C. Kirby, Little Rock, Chairman; N. D. McCormack, Fort Smith; H. W. Browning, Little Rock.

HOSPITALS

J. D. Southard, Fort Smith, Chairman; D. A. Rhinehart, Little Rock; J. T. Palmer, Pine Bluff.

ERECTION OF MONUMENT MARKING SITE OF FIRST LEGALIZED DISSECTION IN ARKANSAS

James H. Lenow, Little Rock, Chairman; J. P. Runyan, Little Rock; Robt. Caldwell, Little Rock; H. Moulton, Fort Smith.

ANNOUNCEMENTS

REGISTRATION

The registration desk will be located in the lobby of the New Capitol Hotel and open from 8 a. m. to 5 p. m.

The delegates that have not mailed in their credentials are requested to register as early as possible, so that the official roll of the House may be made up and that the House of Delegates may proceed with its business, beginning promptly at 9:30 a. m. Members and visiting ladies are also requested to register and receive the official badge and program.

The members of the Woman's Auxiliary will also please register and receive a program and the official badge of their organization.

COMMERCIAL EXHIBIT

(Homer Scott, in Charge)

Several high-class commercial exhibits will be on display and our members are urged to visit this interesting exhibit of books, instruments, office equipment and products of many manufacturing plants.

SCIENTIFIC EXHIBIT

This exhibit will be conducted by the Committee on Scientific Exhibits, C. E. Oates, Chairman; Homer Scott and D. E. White. Suitable space has been arranged on the mezzanine floor of the New Capitol Hotel, and our members are urged to attend and lend their encouragement to the committee's labors and assist in developing this attractive addition at our meetings.

HYGEIA EXHIBIT

The health magazine HYGEIA, published by the American Medical Association will have an exhibit and solicit subscriptions.

All papers read at this meeting are the property of the Arkansas Medical Society, and as soon as read should be handed to the Secretary.

The program will be crowded and the announced time of starting all sessions will be adhered to in every case.

During the discussion of papers, speakers will please step near the president's desk so that the audience and the stenographer may plainly hear their remarks.

PROGRAM OF ENTERTAINMENT

Wednesday, May 11—8:00 P. M.

Public Session—New Capitol Hotel.

Thursday, May 12—8:30 A. M.

Members and ladies are invited to attend the Memorial Session, New Capitol Hotel, 8:30 to 10:00 A. M.

Thursday, May 12—8:00 P. M.

President's Reception—New Capitol Hotel.

Musical Program and Entertainment.

Dancing.

Friday Afternoon, May 13

Tickets to the Travelers baseball game will be provided for the visiting members.

GOLF TOURNAMENT

A Golf Tournament will be held throughout the entire three days at the Little Rock Country Club in charge of Dr. C. C. Kirk.

The Dewell Gann Loving Cup will be the prize for the high score in golf at all State Meetings.

CIVIC CLUBS

The following civic clubs will meet at the Hotel Marion during the session and have extended a cordial invitation to the visiting members of these respective clubs who attend the State Medical Convention:

Wednesday Noon—Lions.

Thursday Noon—Rotary.

Friday Noon—Civitan.

WOMAN'S AUXILIARY OF THE
ARKANSAS MEDICAL SOCIETY

OFFICERS

President—Mrs. Dewell Gann, Sr., Benton.

President-Elect—Mrs. C. T. Drennen, Hot Springs.

Vice-President—Mrs. T. G. Porter, Hazen.

Secretary—Mrs. Dewell Gann, Jr., Little Rock.

Publicity Secretary—Mrs. Homer Scott, Little Rock.

Parliamentarian—Mrs. C. H. Nims, Hot Springs.

Treasurer—Mrs. W. Robert Richardson, Little Rock.

Historian—Mrs. C. W. Garrison, Little Rock.

DIRECTORS

Mrs. Grayson Tarkington, Hot Springs.

Mrs. C. E. Oates, Little Rock.

Mrs. B. Brewster, McCrory.

Mrs. R. H. T. Mann, Texarkana.

HOST: PULASKI COUNTY AUXILIARY

President—Mrs. L. D. Reagan.

Vice-President—Mrs. M. E. McCaskill.

Secretary—Mrs. W. D. Rose.

Treasurer—Mrs. R. M. Blakely.

COMMITTEE ON ENTERTAINMENT

Mesdames S. P. Bond, Chairman; Jos. E. Barrett, Wm. R. Bathurst, F. Walter Carruthers, Stacy C. Howell, A. L. Jobe, O. K. Judd, C. C. Kirk, P. L. Mahoney, J. P. Sheppard, A. W. Strauss, Milton Vaughan.

Registration: Mezzanine floor, New Capitol Hotel.

PROGRAM

Wednesday Noon

Executive Session, with luncheon at the Peacock Tea Room. Selection of two members of Nominating Committee.

Wednesday Afternoon—4:00 to 5:00

TEA: At the home of Mrs. Wm. R. Bathurst, 1433 Prospect Ave., in honor of guests and members.

HOSTESS: Pulaski County Auxiliary.

Wednesday Evening—8:00 P. M.

Public Session of the Arkansas Medical Society, New Capitol Hotel.

Thursday Morning—10:00 to 12:00

Executive Committee of the Woman's Auxiliary will hold a session on the Mezzanine floor, Hotel Marion. Selection of additional members of the Nominating Committee.

Address: * Greetings from Texas Auxiliary—Mrs. S. A. Collum, Texarkana, Texas.

The following Committees will make their report:

Program—Mrs. D. A. Rhinehart, Chairman, Little Rock.

Entertainment—Mrs. S. P. Bond, Chairman, Little Rock.

Organization—Mrs. T. G. Porter, Chairman, Hazen.

Finance—Mrs. J. M. Phillips, Chairman, Benton.

Education and Public Health—Mrs. J. B. Crawford, Chairman, Little Rock.

Public Relations—Mrs. D. A. Rhinehart, Chairman, Little Rock.

Constitution and By-Laws—Mrs. C. H. Nims, Chairman, Hot Springs.

Report of Secretary.

Report of Treasurer.

Report of Delegates to Woman's Auxiliary of the A. M. A.

GENERAL SESSION

Thursday—1:00 P. M.

Hotel Marion, Mezzanine Floor

Luncheon.*

Immediately following the luncheon, the meeting will be called to order by the president, Mrs. Dewell Gann, Sr., Benton.

Address of Welcome—Mrs. L. D. Reagan, Little Rock, President Pulaski County Auxiliary.

Introduction of Guests.

Adoption of Minutes of the Second Annual Meeting, held in Hot Springs, May, 1926.

President's Address.

Address—Mrs. J. O. McReynolds, Dallas, Texas.

Report of Presidents of County Auxiliaries.

Report of Nominating Committee.

Election of Officers:

President-Elect, Vice-President, Secretary, Treasurer, Publicity Secretary, Parliamentarian, Historian, Delegates to A. M. A. Auxiliary.

Adjournment.

*Reservation for luncheon should be made as early as possible by writing Mrs. S. P. Bond, 2500 North Jackson St., Little Rock. The local members as well as the visitors should make reservation.

FIFTY-SECOND ANNUAL SESSION OF THE ARKANSAS MEDICAL SOCIETY

HOUSE OF DELEGATES

First Meeting—New Capitol Hotel

The regular annual meeting of the House of Delegates of the Arkansas Medical Society will be held on May 11, 9:30 A. M.

J. M. Lemons, President.

Wm. R. Bathurst, Secretary.

Meeting called to order by J. M. Lemons, president.

Appointment of the Credentials Committee and their report.

Calling roll of Delegates.

Adoption of the minutes of the Fifty-First Annual Meeting as published in the July issue of the Journal of the Arkansas Medical Society.

Appointment of Reference Committee.

President's address to the House of Delegates.

REPORT OF COMMITTEES

Scientific Program—R. J. Calcote, Chairman.

Scientific Exhibit—C. E. Oates, Chairman.

Medical Legislation—Earle H. Hunt, Chairman.

Necrology—Cowley S. Pettus, Chairman.

Health and Public Instruction—C. W. Garrison, Chairman.

Cancer Control—Dewell Gann, Jr., Chairman.

Infant Welfare—A. C. Kirby, Chairman.

Hospitals—J. D. Southard, Chairman.

Arrangements and Entertainment—Homer Scott, Chairman.

Report of the Council—Thad Cothorn, Chairman.

Report of the State Board of Medical Examiners—J. W. Walker, Secretary.

Report of the Delegates to the A. M. A.

Report of the Secretary.

Report of the Treasurer.

New Business.

Selection of the Nominating Committee.

MEETING OF THE COUNCIL

The Council of the Arkansas Medical Society will meet at noon with luncheon in the private dining room, Hotel Marion, immediately following the adjournment of the morning session.

GENERAL SESSION

New Capitol Hotel

Wednesday, May 11—1:30 P. M.

Calling of the Society to Order—J. M. Lemons, President.

Invocation—The Very Reverend John Williamson, Dean of Trinity Episcopal Cathedral.

Address of Welcome for Little Rock—Hon. Chas. H. Brough, Ex-Governor of Arkansas.

Address of Welcome for the Profession—Anderson Watkins, President, Pulaski County Medical Society.

Response to the Address of Welcome on behalf of the Arkansas Medical Society—S. J. Wolfermann, Fort Smith.

President's Annual Address—J. M. Lemons, Pine Bluff.

Introduction of Fraternal Delegates—Mississippi State Medical Association, Dr. D. C. Montgomery, Greenville, Miss.

SCIENTIFIC SESSION

"Diagnosis and Treatment of Defective Children"—William Engelbach, St. Louis, Mo.

"Medical Treatment of Simple Non-Surgical Goiter"—H. H. McAdams, Jonesboro.

"Replacement Therapy"—J. H. McCurry, Cash.

"Treatment of Diarrhea in Children"—Don Smith, Hope.

"Cardiospasm in Infants, With Report of a Case"—Paul H. Power, Pine Bluff.

"Congenital Pyloric Stenosis, With Report of a Case"—L. L. Purifoy, El Dorado.

PUBLIC SESSION

8:00 P. M.

New Capitol Hotel

Conducted by the Committee on Program—R. J. Calcote, Chairman; A. S. Buchanan and R. H. T. Mann.

Calling of the Session to Order—R. H. T. Mann, Texarkana.

Music.

"Curbing Quackery an Imperative Duty"—Dr. C. M. Rosser, Dallas Texas.

MEMORIAL SESSION

New Capitol Hotel

Thursday, May 12—8:00 to 10:00 A. M.

Conducted by the Committee on Necrology, C. S. Pettus, Chairman; F. B. Kirby and E. E. Barlow.

Invocation—Rev. L. M. Sipes, Pastor, First Baptist Church.

Music.

Address.

DECEASED MEMBERS

Aley S. Hoover, Stamps, May 31, 1926.

Harry Clay Stinson, Dermott, June 15, 1926.

James B. Roe, Newark, June 17, 1926.

Strodger U. King, Little Rock, June 20, 1926.

Carle Edwin Bentley, Little Rock, June 30, 1926.

John C. Swindle, Walnut Ridge, July 10, 1926.

Samuel L. Brooksher, Yellville, July 12, 1926.

William Horace Bennett, Paris, July 18, 1926.

Thomas M. Rice, Avoca, July 23, 1926.

Albert Ross Simpson, Corning, August 19, 1926.

Leonidas Kirby, Harrison, August 20, 1926.

Louis P. Furbish, Mellwood, October 19, 1926.

Cleveland B. Hollabaugh, Leslie, November 9, 1926.

Roy Rice, North Little Rock, November 18, 1926.

Robert Hardin, Cummins, November 22, 1926.

Hiram L. Throgmorton, Pocahontas, November 30, 1926.

William Harvey Moorhead, Stuttgart, December 2, 1926.

Robert Lee Grant, Texarkana, December 6, 1926.

Robert P. Nall, Armored, December 21, 1926.

Chas. C. Price, Dumas, January 2, 1927.

John M. Osborne, Howell, January 6, 1927.

Lawrence C. Gray, Clarksville, January 21, 1927.

William M. McRae, Blytheville, February 2, 1927.

Edward Franklin Hodges, Branch, February 5, 1927.

Frederick Eugene Harrison, Fordyce, February 17, 1927.

Frank Lucas French, Little Rock, February 28, 1927.

John Foster Bradley, Lamar, March 4, 1927.

(Members who know of the death of any member, notice of which has not appeared in the Journal, should immediately communicate the particulars to the State Secretary or to the chairman of the Committee on Necrology).

SCIENTIFIC SESSION

New Capitol Hotel

Thursday, May 12—10:00 A. M.

"Bone Tumors, Their Diagnosis and Treatment"—Barney Brooks, Nashville, Tenn.

"Prevention and Treatment of Certain Complications following Laparotomy"—C. S. Williamson, Little Rock.

"The Importance of Sinusitis" with Lantern Slide Demonstration—Paul L. Mahoney, Little Rock and D. A. Rhinehart, Little Rock.

"Treatment of Epididymitis"—H. King Wade, Hot Springs.

"Ascites, Treated Surgically," Subsequent report of a Case—R. C. Dorr, Batesville.

"Injury to the Biliary Tract"—T. F. Kittrell, Texarkana.

AFTERNOON SESSION

1:30 P. M.

"High Fat, Low Carbohydrate Diet in Gastric and Duodenal Ulcers"—Seale Harris, Birmingham, Ala.

"Use of Pituitrin in Obstetrics"—E. H. White, Little Rock.

"Electro-Therapy in the Treatment of Vomiting of Pregnancy"—T. H. Jones, Magnolia.

"Tularemia"—S. C. Fulmer, Little Rock.

"Development of Preventive Medicine"—F. Michael Smith, Pine Bluff.

"Headaches of Unusual Origin," with Report of Case—Geo. B. Fletcher, Hot Springs.

"Intestinal Myiasis," with Report of a Case—A. A. Blair, Fort Smith.

"Standardization of the Patella Reflex," Demonstration of Apparatus—A. C. Wenger, Hot Springs.

"Leukemia"—J. H. Fowler, Harrison.

"The Trend of Medical Practice of Today"—J. K. Smith, Texarkana.

"A Light on Acute Cervical Adenitis"—H. H. Rightor, Helena.

PRESIDENT'S RECEPTION

8:00 P. M.

New Capitol Hotel

Musical Entertainment.

Dancing.

CLINICAL SESSION

Friday, May 13—8:00 to 11:00 A. M.

Little Rock Hospitals—Further announcement later.

CITY PARK

Friday, May 13—11:00 to 12:00 A. M.

Unveiling of Monument to First Human Dissection in Arkansas—In charge of Committee, J. H. Lenow, Little Rock, Chairman.

Address—F. Vinsonhaler, Little Rock.

FINAL MEETING OF THE HOUSE OF DELEGATES

New Capitol Hotel

Friday, May 13—1:30 P. M.

Roll Call.

Report of Nominating Committee.

Election of Officers:

President-Elect, First Vice-President, Second Vice-President, Third Vice-President, Secretary, Treasurer, Five Councilors.

Report of Committees.

Further New Business.

Adjournment.

FINAL GENERAL SESSION

New Capitol Hotel

(Friday afternoon, May 13, immediately after adjournment of the House of Delegates.)

Calling meeting to order by J. M. Lemons, president.

Unfinished Business.

New Business.

Selection of Place for next meeting.

Adjournment.

Want X-Ray Supplies "P-D-Q"?

There are over 30 District Branches now established by the Victor X-Ray Corporation throughout U. S. and Canada. These branches maintain a complete stock of supplies, such as X-ray films, dark room supplies and chemicals, barium sulphate, cassettes, screens, Coolidge tubes, protective materials, etc., etc. Also Physical Therapy supplies.

The next time you are in urgent need of supplies place your order with one of these Victor offices, conveniently near to you. You will appreciate the prompt service, the Victor guaranteed quality and fair prices.

Also facilities for repairs by trained service men. Careful attention given to Coolidge tubes and Uviarc quartz burners received for repairs.

VICTOR X-RAY CORPORATION
Main Office and Factory: 2012 Jackson Blvd., Chicago

Memphis - - 407 Madison Avenue
Oklahoma City - 206-8 Lynds Bldg.



Victor X-R-P Safe

A lead-lined steel cabinet for storing films and loaded cassettes.

Write SUPPLY SALES DIVISION for price and detailed information.

Quality Dependability Service Quick - Delivery
~ ~ Price Applies to All ~ ~

"UNIVERSAL" SPECTRO-SUN

The Easiest Ultra Violet Lamp To Use

\$225.00
COMPLETE

SUPREME
IN

SAFETY---

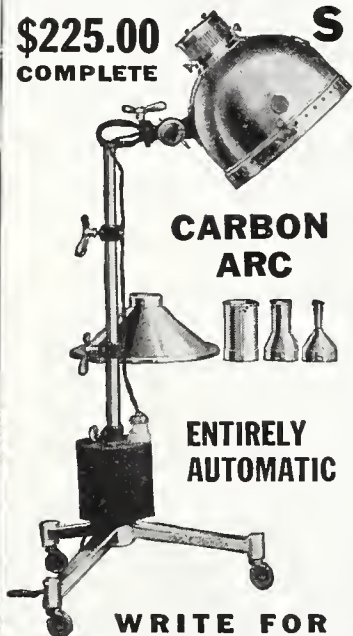
Maximum Germicidal and Biologic reactions without injuring normal tissue

EFFICIENCY---

Simultaneous use of Ultra Violet, Radiant Light and Infra-Red rays gives deeper penetration and greater clinical efficiency.

DOSAGE---

Energy never varies, thus for the first time in history standardized Ultra Violet dosage is possible.



CARBON ARC

ENTIRELY AUTOMATIC

WRITE FOR LITERATURE

FREE CLINICAL DEMONSTRATION in your office

PAUL E. JOHNSON, Inc.
1824-30 S. ALBERT ST. CHICAGO



YOU will be interested in this new 1927 book which contains nearly 300 pages of new and standard equipment, instruments and supplies.

FRANK S. BETZ CO., Hammond, Indiana.

I want my copy of the Betzco General Catalog for 1927 sent at once to the following address:

Name.....

Address

City..... State.....

THE JOURNAL

OF THE Arkansas Medical Society

PUBLISHED MONTHLY UNDER THE DIRECTION OF THE COUNCIL

Vol. XXIII

LITTLE ROCK, ARK., MAY, 1927

No. 12

Original Articles

COMMONER DISEASES OF THE FEMALE URETHRA

H. H. HOWZE, M. D., Texarkana.

There is found little discussion of diseases of the female urethra in any of the standard textbooks on either Gynecology or Urology. Indeed, until rather recently, the female urethra was looked upon as a structure having little pathology, save possibly urethritis. Recent investigation shows, however, that the female urethra is subject to much the same diseases as the male urethra, though to be of some-what less extent. For instance, stricture of the female urethra was looked upon as a comparatively rare condition until recent work showed this to be a rather common disease. It is impossible, of course, to discuss all the diseases and disorders of the female urethra in a paper of this scope, so only those which are most frequent encountered will be discussed. It is not the hope of this essayist to bring forth any new facts concerning diseases of the female urethra; but rather to impress upon the physician the importance of ruling out urethral disease in gynecologic cases, especially those having a vague symptomatology. There will be discussed the following subjects in the order listed, since they are the ones most frequently encountered:

First—Acute Urethritis.

Second—Chronic Urethritis.

Third—Urethral Stricture.

Fourth—Urethral Caruncle.

ACUTE URETHRITIS: Acute urethritis in the female is almost always the result of infection by the gonococcus. While occasional cases which are the result of infection by the colon

bacillus and the staphylococcus are seen, yet they are rather rare. We do see cases of acute urethritis, occasionally, which have resulted from the application of chemicals to the urethra; also urethritis is seen occasionally, though rarely, as a result of irritation from the use of astringent vaginal douches, which have gained entrance into the urethra. Acute urethritis of the female is usually primary. Secondary infection does occur from vaginal and cervical inflammation, but this is not common. It is most often seen in women who have had coitus with men having chronic gonorrhea, resulting in a primary infection of the cervix or vagina. The anatomical position of the urethra predisposes to primary infection.

SYMPTOMS AND DIAGNOSIS: These are too well known to be described at this time. The urethra becomes swollen and hyperemic while the opening of the ducts of Skene's glands become red and swollen. Acute symptoms subside rather rapidly and this formerly led us to believe that healing took place spontaneously. In most cases, while the acute symptoms do subside rather rapidly, the resulting pathology found in so many female urethras leads us to believe that spontaneous healing does not take place so often as was formerly supposed. Many more pass into the chronic form than was heretofore thought. Since so many cases of urethritis in the male have pathologic sequelae, why should we not expect more pathology to be found in the female urethra, an analogous structure, after an attack of acute urethritis?

PATHOLOGY: The anterior one-third of the urethra is the part most involved. Repeated attacks may occur because of re-infection from Skene's glands. During the later stages of an acute gonococcal urethritis, there is a tendency

toward infiltration of the submucous tissue by inflammatory cells. These become converted into fibrous tissue and the overlying mucous membrane is either partially or completely destroyed. With the contraction of this newly formed tissue the lumen of the urethra is compressed or distorted in a variable manner.

TREATMENT: Rest in bed during an acute stage, abundant fluids, giving alkaline drinks to lessen burning on micturition. If burning is rather severe, some preparation of Santal Oil is administered. A persistent case, or repeated attacks, should cause an examination of Skene's glands as the hidden focus.

CHRONIC URETHRITIS: This condition is most often the result of a preceding acute urethritis. It is localized in certain portions of the urethra, seldom involving the entire canal. The principal symptoms is burning on micturition and even this symptom may be absent. Chronic urethritis has a deleterious effect on the general nervous system, especially so if the patient thinks she has a venereal disease. The meatus may remain reddened and swollen, especially if there is an involvement of Skene's gland.

Urethritis in women may come and go without producing noticeable symptoms so that the patient will not seek treatment. Hence, the necessity of examination of this structure in gynecologic conditions. A persistent urethritis is almost always associated with inflammation of Skene's gland.

TREATMENT: The treatment of chronic urethritis is primarily the eradication of infected Skene's glands. The new Electric Skenescope of Walther, recently described in the Journal of the American Medical Association is recommended in this eradication. With this or a similar instrument, by means of a diathermy needle electrode inserted into the gland orifices, these infected pockets are destroyed at one sitting. A preliminary anesthesia of 1 per cent cocaine or butyn is satisfactory.

STRICTURE OF FEMALE URETHRA: It was noted under the discussion of pathology of urethritis, above, that the inflammatory cells became converted into fibrous tissue, which later contracted and compressed or distorted the lumen of the urethra; thus strictures, either single or multiple, may result. A stricture in one woman may not cause any considerable inconvenience; whereas, the same stricture in another may cause pronounced symptoms; hence the necessity of seeking for

them. Anyone doing a good number of cystoscopic examinations in women knows how often difficulty is encountered in passing the instrument through the urethra, especially the anterior part of it. This resistance is met even when local anesthesia is satisfactory. Some times this resistance is due to spasm, but most of the times there is a definite pathologic resistance due to a partial obstruction of the lumen. Many women, who before cystoscopy complain of various urinary symptoms, not only limited to the lower urinary tract, but even referable to the renal area, report complete relief from symptoms following a single cystoscopy.

Mrs. D., age 26, referred to me because of pain in left renal area. She was told that she had a stone in the bladder. No stone was found present on examination, but there was encountered a definite abnormal resistance to the passage of the cystoscope through the urethra. She is now, five months later, free of all symptoms. In this case merely breaking down a urethral stricture relieved her of all symptoms.

Medical literature contains little information about stricture of the female urethra. The more evident pathology of the ureters and adnexa cause all the blame for symptoms to be placed on these organs, resulting in failure to examine the urinary tract properly. The recently recognized importance of urologic diagnosis has brought out the importance of examination of the female urethra for stricture or other pathology. The frequency of stricture in the male should suggest the importance of examining the female urethra for similar pathology. Otis (1) states that "strictures of the female urethra occur in sufficient extent to induce reflex conditions as varied and severe as in the male." In textbooks of Urology and Gynecology, little space is allotted to the subject of urethral stricture in women. Stevens (2) found ninety cases of stricture in the female urethra in 169 urologic cases examined. Certainly these figures will impress one of the importance of this subject.

1. Medical Record 41; 32-37, 1892.
2. Journal of the American Medical Association, November 22, 1924.

While we do not attempt to maintain that stricture of the female urethra is so common as in the male urethra, yet it is present to an extent which will warrant its importance as a definite clinical entity. Stricture may re-

sult from various injuries to the female urethra, as at child birth, most cases are the result of previous gonococcal infection.

SYMPTOMS AND DIAGNOSIS: It is difficult to obtain a venereal history, but this should be attempted. Often women have gonorrhea without knowing it. A history of persistent leucorrhea is always suggestive. The previous use of irritant astringent vaginal douches should not be overlooked. Clinical symptoms may be mild or absent. One important symptom is difficulty in emptying the bladder. In some cases the symptoms will suggest abdominal or renal lesions. In others, symptoms may be so remote as to cause the patient to be classed as a neurotic. A cystitis due to retention may be the first symptom presented. Some patients will come to you and say that they have a bladder stone. Dysuria, urgency and frequency are valuable symptoms. The relationship between the urethra and kidney through the sympathetic nervous system may cause symptoms suggestive of renal disease, as in the patient who is mentioned above. There are no pathognomonic signs of urethral stricture in the female. The gynecologist should examine the urethra or call in the urologist in these cases. Urethroscopy is always indicated in urinary lesions of the female.

TREATMENT: Treatment is essentially dilatation preferably by the slow modified method. If the obstruction is soft, rapid dilatation may be performed. This necessitates anesthesia. We prefer gas anesthesia for this procedure. Hemorrhage must be watched for in the removal of strictures.

URETHRAL CARUNCLE: This is the most frequent neoplasm of the urethra. It appears as a bright red isolated growth, lentil to pea-sized, almost always found on the posterior surface of the meatus. It is usually smooth, soft and fragile in consistency. This tumor is composed largely of dilated capillaries and may be confused with angioma. It is abundantly supplied with nerves, which fact has an important bearing on its symptomatology; it accounts for its extreme sensitiveness and tendency to bleed.

ETIOLOGY UNKNOWN: The tumor may occur at any age, but is most common near the menopausal years. It is found most often in women who have borne children.

SYMPTOM: The most prominent symptom is pain, which may be very severe. This is intensified during urination and is sometimes

excited by walking or sitting. It is a common cause of dyspareunia. The large amount of nerve tissue present in these caruncles may cause symptoms which apparently seem to arise from the nervous system.

Mrs. B., age 35, who has had one child, came complaining of rapid loss of weight, extreme nervousness, insomnia. She had consulted an internist, fearing tuberculosis; he drained her gall-bladder three times with the duodenal tube, without benefit. Next goiter was suspected, but ruled out. She next consulted a dermatologist who failed to find the cause of the trouble. She had also had two or three vaginal examinations without the cause being found. On examination, a caruncle was found and removed. All symptoms were relieved and have not returned.

DIAGNOSIS: Readily made on inspection. The tumor projects as a bright red mass, polypoid or sessile, nearly always attached to the floor of the urethra. It is extremely tender and simple examination may cause excruciating pain. It is important to differentiate this condition from simple granulation tissue and also prolapse of the urethra. This is readily done by examination.

TREATMENT: Surgery, radium, electro-coagulation. This tumor is very hard to remove entirely surgically, and there is apt to be considerable hemorrhage. Removal by radium or electro-coagulation, is the method of choice. We have found radium most satisfactory, as no anesthesia is required and the morbidity is negligible.

SUMMARY

1. Diseases of the female urethra are more common than has heretofore been presumed. There should be an examination of the female urethra in all gynecologic cases where the pathology is not definitely evident in other locations to account for the symptoms.

2. The connection of the urethra to other organs through the sympathetic system may cause symptoms to be referred to the pelvic or renal regions.

3. Stricture of the female urethra is a definite clinical entity.

4. Endoscopy in women should be a routine procedure.

5. All cases of recurrent urethritis should cause an examination of Skene's glands. These foci can be readily eradicated by diathermy.

6. Urethral caruncle is best treated with radium or electro-coagulation, thus lessening the morbidity of these cases.

7. There may be a urethritis without definite symptoms, hence the necessity of examination of this structure.

EYE MANIFESTATIONS OF TOXEMIAS OF PREGNANCY

J. G. MITCHELL, M. D., El Dorado

According to the latest work of J. Whitridge Williams of Baltimore, the toxemias of pregnancy are divided as per the following headings:

Nephritic Toxemias.

Pre-eclamptic Toxemias.

Eclampsia Toxemias.

Presumable Toxemias.

Dr. Williams asserts that there has been very little advancement in the pathologic aspect of this condition for a long time. There being some more knowledge of the clinical aspect, however. Dr. Williams, in his work, has maintained a laboratory for the past seven years, for the investigation of these toxemic conditions, which has been under the direction of Drs. Stander and Peckham. They report one hundred twenty patients examined. After considering the results they advise the above classification of toxemias as follows:

Eclampsia.

Pre-eclampsia.

Chronic Nephritis.

Eclampsia superimposed on chronic nephritis and low reserve kidney.

The question of just why the selection retinal changes and, also, optic nerve change in these toxemias, or any case of nephritis, is still a mooted one. Most authorities lean toward the toxemic theory; also, it is thought that the pigment epithelium of the retina is especially predisposed or is especially non-resistant to the toxins.

During the time I was doing general work, I personally had occasion to examine and see three different patients suffering with this trouble; only one of which it is possible to communicate with at this time. This patient gives the following history:

"Mrs. A. E. W., age 20 years; history during childhood uneventful. During the last three months of the gravid period she was rather pronouncedly hydropic; especially the lower extremities. During the last week she experienced daily, several intervals of complete blindness. Under rigid eliminative treatment and quiet in bed, her vision would return. This patient developed eclamptic convulsions with the first evidence of pain it became necessary to anesthetize and deliver with forceps. She had eclamptic convulsions at intervals for forty-eight to seventy-two hours, following delivery. This was her first child. Her vision, as far as she can judge now, is normal and has been ever since the convulsions ceased. She has borne two children since that time and at neither time has she had a repetition of any of the symptoms described above."

The following case was referred to me on February 15, this year.

"A negro girl, aged 15 years, first pregnancy; history during childhood revealed nothing unusual. She was then about seven months gravid, and gave history of failing vision for about one week; had noticed some edema about the ankles and feet for two or three weeks. No untoward symptoms whatever except failing vision. On examination of the eye ground there was a fairly well-established retinitis assuming more of an edematous type than of a hemorrhagic type. The nerve heads showed very little indications of edema. She had been advised by her family physician to take rigid eliminative treatment and rest in bed. I did not see fit to add anything to this, but impressed her to carry it out without fail. She cleared up perfectly after the eliminative treatment along with rest in bed."

I have had an occasion to observe two or three patients within the past six years presenting choroidal scars and retinitis pigmentosa in women who gave history of the condition coming on, or dating from the last weeks of pregnancy. It seems that the toxin has a predilection for the pigment epithelial cells of the retina; hence the symptoms of night blindness is often observed.

Finding textbooks to give so little on the subject, I submit the following from current literature. Case reported by Dr. W. A. Holden, New York, and Published in *Journal A. M. A.*, July 4, 1914.

"February 3, 1913. Mrs. G., housewife, aged 25, was admitted to the hospital and said that she was about seven months pregnant, for the second time; that she had vomited during the first three months of her pregnancy, and that for a month her feet had been swollen at night. Her chief complaints, however, were that for five days she had seen double, and that during this time the sight of each eye had grown rapidly worse. The legs and feet were slightly edematous, the blood pressure was 160 mm. and the urine (51 ounces on February 4th) contained 20 per cent albumin and many cells, and was alkaline. She was kept in bed on active eliminative treatment and the urine increased greatly in volume and the percentage of albumin was reduced, while the reaction became acid.

EXAMINATION OF THE EYES—February 6, he found a paresis of the left external rectus.

Vision was reduced to the recognition of movements of the hand. The fundi was normal in appearance except for a trace of retinal edema about the macula lutea in each eye, which was not sufficiently marked to cause obscuration of vision.

COURSE: He advised the immediate induction of labor in order to save her vision, and the patient was at once delivered of an eight-months still born child. From the obstetric point of view she had a rapid and uncomplicated recovery, and her sight became rapidly better, while the albumin was reduced and the blood pressure fell and she was discharged in good condition February 22nd.

March 3, 1913, he saw the patient again and found that her vision had returned within a few days after the operation and was 20-20 in each eye with normal fields. There had been complete recovery from the paresis of the external rectus also. She said that since leaving the hospital she had experienced much difficulty in seeing at night; and in each macular region of the retina, which had, a month before, been edematous, there was now an abnormal pigmentation. The fundi were otherwise normal.

July 22, 1913, the night blindness was said to be less pronounced, but the abnormal pigmentation was found to have spread from the macular region out to the periphery of each retina.

October 9, 1913, the pigmentary changes were more pronounced.

January 29, 1914. The condition was unchanged.

This chronic progressive disturbance in the pigment epithelium of the retina would seem to be due to the same toxic condition of the blood which, when more intense, caused paresis of one external rectus muscle and the retrobulbar affection of the optic nerves.

In many of the cases of blindness in eclampsia we must suppose that there is an edema affecting the calcarine cortex or the optic radiation on each side, which in some cases caused destruction of tissues, and therefore produces permanent defects in the fields of vision."

Dr. R. L. Randolph of Baltimore, some years ago, reported five cases of retinal involvement in pregnant women in whom the ophthalmoscopic picture consisted largely of swelling and pallor of the retina. Evidence is at hand to show that permanent impairment of sight may follow too long a delay in inducing premature labor. In one of his cases in which at a previous pregnancy a pronounced albuminuric retinitis occurred, the woman in her desire to have a child delayed the induction of labor and suffered in consequence partial and finally permanent loss of sight. It is clear, however, from what he could learn that these ophthalmoscopic findings known as edema of the retina and albuminuric retinitis, are rarely followed by permanent and complete blindness, though considerable impairment of sight may be present at the time. He thinks this favorable termination is largely due, of course, to the usual attitude of the medical attendant in dealing with these cases, that is, promptly to induce labor, on account of the danger not only of the loss of sight, but also of eclampsia.

THE TREATMENT

The treatment is largely that of eclampsia and I think all will agree that the treatment of eclampsia is largely preventative; however, one should be on the lookout for the so-called low reserve kidney; that is, a kidney whose capacity or function has been lowered by destruction of glomerulae and uriniferous tubules by some form of nephritis. It is obvious that the interstitial nephritis, or the contracted type of kidney in which the destruction of the above mentioned histological structures have been replaced by fibrous tissues, would be very susceptible to the increased demand on it consequent to pregnancy; therefore, this type of kidney in my mind assumes the role of "a negro in the woodpile" for the acting obstetrician. It is and has been my experience that this form of kidney is not well enough recognized by the most of us. It is comparatively difficult to make a diagnosis of a moderate type of interstitial nephritis. This, in my opinion, is due largely to the incipency of the symptoms clinically; and, to the fact that the urine does not show, as a rule, albumin in anything more than a faint trace and an occasional hyaline cast, and it is not very often that the general man, owing to the fact that this time is so completely consumed in practice, can take the extreme pains which is required in concluding a reasonably efficient diagnosis.

It is my opinion that in the case of all patients showing symptoms of toxemia, the daily volume of urine, as well as the percentage of albumin, should be ascertained, and, in extreme cases, a chemical examination of the blood. This would no doubt indicate to the obstetrician the most feasible course to pursue. Of course, the obstetrician is nearly always handicapped in the handling of these cases on account of lack of co-operation on part of patient and to the fact that it is often the case that he is not called until some pretty severe symptom of toxemia appears.

It is my opinion that in any case, regardless of period of pregnancy where the eye grounds show hemorrhage, and swelling of the nerve heads, with the consequent visual disturbance, termination of pregnancy should be most seriously considered.

THE JOURNAL

OF THE

ARKANSAS MEDICAL SOCIETY

Owned by the Arkansas Medical Society and Published under the direction of the Council.

WILLIAM R. BATHURST, Editor
810-812 Boyle Building, Little Rock, Arkansas.

Published Monthly. Subscription \$3.00 per year; single copies 25 cents.

Entered as second-class matter, June 21, 1906, at the postoffice at Little Rock, Arkansas, under the Act of Congress of March 3, 1879.

Acceptance for mailing at special rate of postage provided for in Section 1103, Act of October 3, 1917, authorized August 1, 1918.

The advertising policy of this Journal is governed by the rules of the Council on Pharmacy and Chemistry of the American Medical Association.

All communications of this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the State. Notice of deaths, removals from the state, changes of location, etc., are requested.

OFFICERS OF THE ARKANSAS MEDICAL SOCIETY

J. M. LEMONS, President.....	Pine Bluff
HENRY THIBAUT, President-Elect.....	Scott
G. E. TARKINGTON, First Vice-President.....	Hot Springs
T. F. KITTRELL, Second Vice-President.....	Texarkana
J. H. FOWLER, Third Vice-President.....	Harrison
R. J. CALCOTE, Treasurer.....	Little Rock
WM. R. BATHURST, Secretary.....	Little Rock

COUNCILORS

First District—THAD COTHERN.....	Jonesboro
Second District—J. L. JONES.....	Searcy
Third District—M. C. JOHN.....	Stuttgart
Fourth District—W. T. LOWE.....	Pine Bluff
Fifth District—W. P. COOKSEY.....	Magnolia
Sixth District—B. C. MIDDLETON.....	Texarkana
Seventh District—DEWELL GANN, SR.....	Benton
Eighth District—ANDERSON WATKINS.....	Little Rock
Ninth District—SAM G. DANIEL.....	Marshall
Tenth District—THOMAS DOUGLASS.....	Ozark

COMMITTEES

SCIENTIFIC PROGRAM—R. J. Calcote, Little Rock, chairman; A. S. Buchanan, Prescott; R. H. T. Mann, Texarkana.

SCIENTIFIC EXHIBIT—C. E. Oates, Little Rock, Chairman; Homer Scott, Little Rock; D. E. White, El Dorado.

MEDICAL LEGISLATION—Earle H. Hunt, Clarksville, chairman; J. W. Walker, Fayetteville; Thad Cothern, Jonesboro.

STUDENT LOAN FUND—E. F. Ellis, Fayetteville, chairman; J. H. Lenow, Little Rock; Wm. R. Bathurst, Little Rock; G. A. Warren, Black Rock.

NECROLOGY—Cowley S. Pettus, Little Rock, Chairman; F. B. Kirby, Harrison; E. E. Barlow, Dermott.

HEALTH AND PUBLIC INSTRUCTION—C. W. Garrison, Little Rock, chairman; F. Michael Smith, Pine Bluff; M. E. McCaskill, Little Rock; President and Secretary of State Society.

CANCER CONTROL—Dewell Gann, Jr., Little Rock, chairman; John S. Jenkins, Pine Bluff; J. C. Hughes, Hoxie.

INFANT WELFARE—A. C. Kirby, Little Rock, chairman; N. D. McCormack, Ft. Smith; H. W. Browning, Little Rock.

HOSPITALS—J. D. Southard, Fort Smith, chairman; D. A. Rhinehart, Little Rock; J. T. Palmer, Pine Bluff.

Editorials

ANNUAL MEETING IN SESSION

As this issue of the Journal goes to press the annual meeting of the Arkansas Medical Society is in session. As this is written before the meeting was called to order, it is manifestly impossible to say anything about it, but we trust that in our next issue we will be in a position to set forth that it was a record breaker in attendance and value. If the attendance is not equal to expectations at this writing, the cause may readily be found in flood conditions, not only interfering with transportation to some extent, but keeping some of our members in the flooded districts busy with preventive measure, lest sickness on a serious scale be the sequel.

As usual the next issue of the Journal will contain a resume of the proceedings and in that and later issues will appear the entire transactions and some of the important papers read at the meeting.

MEETING A CRISIS

Sanitary measures and preventive medical treatment after the recent floods have proven their incalculable value and doubtless saved many lives by averting epidemics. Our Health Officer Garrison, the members of the State Board of Health, and their efficient office force, have been busy night-and day. Dr. Garrison, Secretary of the Board, has shown wonderful ability and energy in handling the situation, which has no precedent in any flood disaster in the memory of anybody living. In some camps there has been some sickness, but it is a tribute to the medical profession that no epidemic has been reported. The herding together of men, women and children, and with them in some instances, domestic animals, and uninvited wild animals, for days at a time on high spots before they could be rescued, with no sanitary equipment, insufficient food and water supplies, together with inevitable soil pollution, must have precipitated serious conditions, but for the prompt measures and the untiring efforts of the medical authorities.

The members of our profession gave the best that was in them, untiringly and unselfishly, but exposed themselves unhesitatingly to danger, even to death. For example, Dr. DeClark of McGehee narrowly escaped drowning while answering a call when his boat was

overturned. Had he not been a good swimmer, he must inevitably have been drowned as he had to swim quite a distance in the rapid current before he was rescued.

In this connection, it is in order to note the great work done at Little Rock by the Arkansas Water Company, and the men working under the direction of the officials, in preventing the inundation of the pumping station. Day and night they worked, even at times when it seemed that the labor would prove futile and a possible water famine was fortunately averted. What a water famine would have meant to the health of the city of Little Rock is almost unthinkable.

The various health authorities deserve recognition for their excellent work and their untiring zeal and prompt preventive measures taken. Yet in their zeal and anxiety there has been some criticism of the fact that many applying for vaccination against typhoid are well able to pay, were referred to the Free Clinics, already overworked, instead of to the family physicians.

At one of the larger clinics in Little Rock, physicians in charge complained of the distance from the clinic he was compelled to park his car, due to the congestion of the pauper's automobiles. With this sole exception, there is no room for criticism of the splendid efforts of the local health officer.

Throughout the State members of the medical profession had a Herculean task, such as never confronted them before over so large a territory and involving so many people. Just how unselfishly and with such self-sacrifice of their own comfort and well being, this great work was accomplished and the people spared epidemics in addition to the physical damage to property and crops would make an epic which never can be adequately told.

Editorial Clippings

MEDICAL EUROPE FOR THE SOUTH

The Southern Medical Association covers a large area extending from the eastern border of Maryland to the Rio Grande. In this territory are more than one-third of the physicians and hospitals of the United States. This is a young country, fresh in its power of initiative and originality, but greatly influenced in the past and wisely so in the present by European medicine. The physician in general is a student who learns from anyone who can teach

him. The United States is by far the richest country in the world, has more than half the gold of the world and manufactures one-half of all the articles in the world. Not more than 5 to 10 per cent of these articles are sent abroad. There is danger lest our pride and power of possession shall exceed our pride and power of scholarship and knowledge.

Some of the greatest medical scholars of the world are in Europe. They visit this country from time to time and gladly come. They usually visit a few cities in the Eastern States on the Atlantic Seaboard southward as far as Baltimore, then by Pittsburgh or Buffalo to Cleveland or Chicago, the Mayo Clinic, and rarely to St. Louis, and still more rarely to the Pacific Coast. The South, as a rule, is entirely neglected and southern medicine is without their stimulus. In recent years the surgeon, Stiles of Edinburg, has visited Boston and the Mayo Clinic. Aschoff, the pathologist from Germany, and Wenckebach, the cardiologist of Vienna, have visited the Eastern points, as have Faber, of Copenhagen, Julius Bowers, the endocrinologist of Vienna, and others equally distinguished.

With the above introduction, Dr. Stewart R. Roberts, of Atlanta, suggests that the Southern Medical Association invite one or two distinguished European physicians to tour the South annually and to give lectures and clinics as circumstances and requests may indicate in such medical centers of the Southern States as the medical societies of the cities may desire. A committee to select these visitors could be appointed by the President of the Southern Medical Association for a five-year service. The expenses to the medical society in each city would be very small proportionately. For example, for two months such a visitor could cover Washington, Richmond, one of the Carolina cities as Charlotte or Asheville, Columbia or Charleston, Atlanta, Birmingham, Memphis, New Orleans, Nashville, Louisville and possibly one or two cities of Texas.

The incoming of a person delivering new ideas into the medicine of the South once or twice annually would be a stimulus and an inspiration to Southern medicine. The method is simple, the expense is small, medical scholarship in Europe is profound, and the advantage to Southern medicine would be tremendous. Not many physicians in the South can go to medical Europe. Let them bring medical Europe to the South.

Dr. Roberts' idea is valuable and timely and has already received the hearty endorsement of the President of the Association, Dr. J. Shelton Horsley of Richmond, Va. The Journal invites a further expression of opinion from its readers—*Southern Medical Journal*.

Abstracts

MALARIA TREATMENT OF GENERAL PARALYSIS

Walter Freeman, Washington, D. C. (Journal A. M. A., April 2, 1927), has examined the brains of fifteen paralytic patients who had been subjected to the malaria treatment. It seems that therapeutic malaria is followed rapidly by organization of the inflammatory exudate in the meninges and about the blood vessels. During the following months the exudates are resorbed and the glia and vascular tissue regress to a great degree. Finally, the cortical architecture is reconstructed by resumed cellular polarity and restored lamination and perhaps by thickening of the cortex. The ganglion cells of the cortex are more or less reduced in number. Fibrous glia beneath the pia and ependyma changes little. Spirochetes are not found. On the basis of these fifteen cases, Freeman says it may be prophesied that eventually the term recovery will come to be used for certain cases instead of remission. Except for some reduction in the number of neurons in the cerebral cortex and marginal fibrillar gliosis, the anatomic picture practically does not deviate from the normal, and the brain is evidently in satisfactory working condition, to judge from histologic appearances. The necessity for early treatment is indicated by complete anatomic arrest without clinical improvement in a case of four years' duration before treatment.

Personal and News Items

French Lick Springs Hotel, Indiana, is now in mid-season, with horseback riding, golf, and other recreations vying with each other in popularity. Many visitors go to French Lick for the mineral waters that abound there in the region so well-known as the "Lost River Valley." It is a picturesque as well as a

historical section about which books have been written. But the healthful climate and the mineral waters continue to be the chief attraction for thousands of visitors each year. The beautiful gardens and surroundings of French Lick Springs Hotel bespeak the peaceful and healthful atmosphere which prevails there. The percentage of illness is considerably less there than in other cities, towns and villages of Indiana. Still the authorities provide for those who may be sick. Dr. A. H. Harold, an experienced physician of Indianapolis, has recently accepted the position as Medical Director at French Lick Springs Hotel.

The Virginia State law providing for the sterilization of mental defectives was upheld by the United States Supreme Court in an opinion deemed of much importance because of the agitation for similar legislation in other States.

The majority of the courts, in the opinion written by Mr. Justice Holmes, held "that it is better for all the world, if, instead of waiting to execute degenerate offspring for crime, or to let them starve for their imbecility, society can prevent those who are manifestly unfit from continuing their kind."

The decision was rendered in the case of Carrie Buck, 18, a feeble-minded person, the daughter of a feeble-minded woman and the mother of a feeble-minded child, now confined in the Virginia State colony for epileptics. The Virginia State Supreme Court of Appeals affirmed a judgment of a county circuit court ordering the superintendent of the colony to perform a salpingectomy upon the patient, whose friends contested the order on the ground that the statute denies incompetent persons equal protection of the laws.

Dr. Morgan Smith, Dean of the School of Medicine of the University of Arkansas since 1913, tendered his resignation to the Board of Trustees of the University yesterday and the Board elected Dr. Frank Vinsonhaler of Little Rock to succeed him. The change will become effective July 1. Dr. Vinsonhaler has been a member of the school faculty for more than thirty years.

Since his appointment as Dean of the School of Medicine in 1913, Dr. Smith has seen Little Rock's only branch of the State University grow steadily and improve until it is a Class A institution.

The city of Helena recently approved the proposed \$150,000.00 bond issue for the purpose of erecting a new city hospital.

At a recent meeting of the Greene County Medical Society, F. M. Scott was elected president and W. M. Majors was elected secretary-treasurer.

Dr. J. F. Merritt has been appointed City Health Officer of Hot Springs National Park, to succeed Dr. Wm. Leland Holt, resigned. Dr. Holt recently fell heir to a very substantial inheritance and plans to visit Europe and the Continent this summer, returning to Little Rock at a later date and confine his practice to pediatrics.

Dr. Henry Thibault of Scott, our President, addressed the Rotarians of Little Rock at their luncheon, Thursday noon, April 28. He took for his theme, "The Negro" and dwelt upon some phases of the interracial problems confronting the people of the South.

At Little Rock, on Wednesday, April 20, at the home of the bride's mother, Miss Lola Scott of Little Rock, was united in marriage to Dr. Kenneth K. Kimberlin of Tuckerman. Dr. C. M. Reves, pastor of Winfield Methodist Church, officiating.

Any of our readers who may be interested in the general questions of medical education and practice may secure a copy of the "Preliminary Report of the Commission on Medical Education" by addressing: Commission on Medical Education, 215 Whitney Avenue, New Haven, Connecticut.

Dr. Geo. F. Jackson announces the opening of offices in the Boyle Building, Little Rock, and will limit his practice to Dermatology, Radium and X-Ray Therapy.

Appointment of two new members on the State Board of Health has been announced by Governor Martineau. Dr. E. L. Watson of Newport was appointed to succeed Dr. R. O. Norris of Tuckerman, whose term has expired. Dr. Watson's term will expire December 31, 1930. Dr. W. P. Parks of Hot Springs was appointed to succeed Dr. S. A. Southall, formerly of Lonoke, who has resigned because he has moved from the State.

Dr. C. E. Benefield of Conway, has moved to Fort Smith, and has opened offices in the First National Bank Building.

At a recent meeting of the Ashley County Medical Society held in the office of Dr. W. S. Norman at Hamburg, the following officers were elected: President, L. C. Barnes of Hamburg; and Secretary, J. W. Simpson of Hamburg.

Dr. Milton Vaughan has moved his office to the Urquhart Building, Little Rock.

WANTED—Salaried appointments for Class A physicians in all branches of the medical profession. Let us put you in touch with the best man for your opening. Our nation-wide connections enable us to give superior service. Aznoe's National Physicians' Exchange, 30 North Michigan, Chicago. Established 1896. Member the Chicago Association of Commerce.—(Adv).

Obituary

DUNAVANT, H. C.—Dr. Henry Clay Dunavant of Osceola, one of the organizers and the first president of the Tri-State Medical Association, died at his home May 2, 1927. Aged 83. With the exception of a few years residence in Little Rock he had practiced medicine in Mississippi County since 1874.

Dr. Dunavant was at one time a member of the Legislature of this State and was given credit for abolition of the old system, whereby insane persons were cared for in pesthouses in each county and the establishment of a central asylum for the insane at Little Rock.

He joined the Confederate Army at the age of 16 and was with General Wheeler in his campaigns and also with General Forrest at Gainesville, Alabama, at the time of the surrender.

He was twice married and is survived by his second wife, Mrs. Bettie Pulliam Dunavant; one daughter, Mrs. F. P. Bennett of Lakeland, Fla.; one son, W. P. Dunavant of Keiser, and a number of grandchildren.

County Societies

JEFFERSON COUNTY

(Reported by J. C. BEARD, Sec.)

The Jefferson County Medical Society held its regular monthly meeting at the office of Drs. Palmer and Lowe on the evening of April 5, 1927; Vice-President, John, presiding. Other members present were Hankinson, Higginbotham, Glover, F. M. Smith, S. E. Smith, Cunningham, Gurney, Lemons, Troupe, Hughes, Shelton and Beard.

Mrs. J. S. Jenkins was present at the opening of the meeting and explained the work which the Arkansas Society for Crippled Children was doing and hoping to do in the future. She also told us about the woman's auxiliary to the Arkansas State Medical Society and asked if we as members of the Jefferson County Medical Society were in favor of organizing a woman's auxiliary in this county.

The Society went on record as being in favor of both the movement for rehabilitating the crippled children and for the organization of a woman's auxiliary in this county.

Dr. Gurney read a paper on "Salpingitis." He said that the etiology from a bacterial viewpoint was the gonococcus, staphylococcus, streptococcus, tubercle bacillus, pneumococcus, and colon bacillus occurring in frequency in the order named. He said in the acute stages the treatment should be palliative, while in the chronic stages it is frequently necessary to resort to surgery. The extent of the surgery should depend upon the extent of the disease.

In opening the discussion Dr. Glover pointed out some of the things *not* to do in the treatment of salpingitis, as well as some of the things to do.

COLUMBIA COUNTY

(Reported by T. H. Jones, Sec.)

The Columbia County Medical Society met in Magnolia, April 12, 1927.

Present: Kitchens, Walker, Horn, Jordan, McLeod, Smith, Cooksey, Baker and Jones.

Dr. Smith read a paper on "Gastric Ulcer" and several interesting case reports were presented.

The doctor's wives met with Mrs. McLeod and organized the Woman's Auxiliary of the Columbia County Medical Society.

The next meeting will be held May 9, and will be a joint session with the Woman's Auxiliary. A banquet will be served and several visiting doctors are expected to be present.

MONTGOMERY COUNTY

(Reported by J. H. McLEAN, Sec.)

The Montgomery County Medical Society met in regular session at Mount Ida, in Dr. Freeman's office, April 12, 1927.

The following members were present: Freeman, Robbins, Stueart, McFadden and McLean.

Officers elected for the ensuing year: President, W. D. Freeman; Secretary, J. H. McLean; Delegate to State Meeting; J. D. Robbins, and Alternate, J. H. McLean.

Dr. McLean read a paper on "Hyperthyroidism," and Dr. Freeman presented two very interesting cases of clinics. Both the paper and the clinics elicited much helpful discussion.

Those present expressed a great delight in the meetings and an invitation is extended to all doctors of the county to become members.

MISSISSIPPI COUNTY

(Reported by F. D. SMITH, Sec.)

The Mississippi County Medical Society convened in regular session in Blytheville, Tuesday, April 12, 1927, with the president, L. D. Massey, presiding.

Present, members: Shedd, Hudson, Saliba, Massey, Husbands, I. R. Johnson, Grimmett, Harwell, Usrey, Wilson, Stevens, Martin and Smith. Visitors: J. B. McElroy and J. L. McGehee, Memphis, Tenn.

Dr. McElroy read a paper on "Acute Nephritis," which he illustrated with slides, and Dr. McGehee's subject was, "The Acute Abdomen." Both were excellent papers and very instructive.

The election of delegate and alternate to the State Medical Society resulted as follows: Delegate, F. D. Smith; Alternate, F. L. Husbands.

The next meeting will be held at Wilson, the second Tuesday in May.

THE BULLETIN

OF

Trinity Hospital

PUBLISHED UNDER THE DIRECTION OF THE STAFF

VOL. 1

LITTLE ROCK, ARK., DECEMBER, 1926

No. 1

Planning A Hospital*

To the average physician, trained in hospitals and working in them the greater part of his life, never comes the realization of the infinite amount of detail which enters into the planning and construction of such an institution. The following is a brief outline of some of the problems met and solved in the planning, construction and equipment of Trinity Hospital.

Bearing in mind the safety of the helpless patient as the primary requirement, the building was rendered as free from fire hazard as modern construction could make it. This specification was carried to extreme lengths, and as a result, even the ceilings are constructed of reinforced concrete beams with four inch slabs of reinforced concrete between. The partitions were built of solid plaster and metal and no wood entered into the building except about the doors and windows. The doors are rather unique even in modern hospitals, each provided with a cheek to close it silently and positively, without knobs or latches to rattle or click, hooks being provided instead, which allow the door to be opened by the wrist even when both hands are full.

The color scheme adopted is a soft gray, both for the walls and for the furniture, which is a distinct relief from the glaring white so often found in hospitals and which provides a much more restful, homelike atmosphere.

The call system is also a noiseless one, so arranged that when the patient turns on the call light it is not possible for him to turn it off until the nurse arrives. The signal lights are placed wherever the nurse may have oc-

asion to be, whether cross corridor, chart room or diet kitchen, so that it is not possible for a light to be overlooked. Adding further to the comfort of the more delicate patients, exhaust fans installed in the kitchens and in the operating rooms carry to the outside all objectionable odors which might otherwise find their way into the building.

All of the rooms are so designed that each is an outside room with all doors in the corridor so placed that no door is opposite to that of the room across the hall. It is therefore not possible to look from one room into another. One feature, so often overlooked in hospitals, which catches the eye of the visitor, is that there are no ceiling lights to glare in the eyes of the recumbent patient.

Departing from the customary procedure in some institutions of turning off the heat at night, the heating system is so arranged that an even temperature is maintained throughout the twenty-four hours.

Building such an institution in a crowded city carries with it certain problems of grounds, lawns, etc., and even when space for these is available the patients are exposed to the curiosity of the passers by. This was solved by building Trinity Hospital in the form of a hollow square with a spacious roof garden, both insuring absolute privacy. The interior of the square is a grass lawn with fountain, goldfish and flowers.

The above are just a few of the numerous details worked out, but will suffice perhaps, to give some idea of what the planning of a hospital means.

TRINITY HOSPITAL STAFF

J. I. Scarborough, M. D.; M. D. Ogden, M. D.; A. M. Zell, M. D.; O. K. Judd, M. D.; R. B. Moore, M. D., and S. T. W. Cull, M. D.

*This is the first of a series of articles. The second will appear in an early number.

SALASCO SANITARIUM SCHOOL



A private school for a limited number of nervous and retarded children in the suburbs of Little Rock.

A handsome modern home with every convenience of the city, is located on a tract of forty acres, comprising lawns, gardens, orchards, playgrounds and groves of beau-

tiful native trees. An ideal situation, secluded, but easily reached by splendid hard-surfaced highway.

Special attention is given to corrective physical work, motor control, habit training and speech. Also facilities for the instruction of certain types of children with impaired sight.

R. F. DARNALL, M. D.

Founder and Superintendent

MISS W. M. BREWER

Educational Director

CITY OFFICE: 508 Federal Bank Building
LITTLE ROCK, ARKANSAS

D. A. Rhinehart, A. M., M. D.

B. A. Rhinehart, A. B., M. D.

DRS. RHINEHART AND
RHINEHART

*Roentgenologists
Clinical Pathologists*

Telephone 4-0741

801-2-3-4 New Donaghey Building

LITTLE ROCK, ARK.

Prevention! Cleanliness!

Samples
Sent on
Request



Physicians
May Prescribe
With Own
Label

Reg. U. S. Pat. Office

Pemco Menthol
Eucalyptus Compound
Nasal Spray

Gently cleanses the nasal passages, helping to prevent colds and infection.

In dry catarrh, it relieves by increasing the moisture and lessening the crusts.

Sinus trouble may be greatly helped and often avoided by using a spray solution which reduces the swelling of the turbinate bodies and allows the sinuses to drain naturally.

In Ozaena it is of great advantage in helping to control the odor.

In one, two and eight ounce bottles.

We supply EPINEPHRIN CHLORIDE 1:1000
U. S. P. Natural—optically Levo-rotatory.

PROPHYLACTO MFG. CO.

(Not Inc.)

227 West Erie Street, Chicago

THE BULLETIN

OF

Trinity Hospital

PUBLISHED UNDER THE DIRECTION OF THE STAFF

Vol. I

LITTLE ROCK, ARK., FEBRUARY, 1927

No. 3

Hospital Charges*

There has been much discussion during the past few years among hospital administrators regarding the most desirable method of making charges for hospital services, and various plans have been advocated. Some institutions have a minimum charge for private rooms of a few dollars a day for which they furnish food, a stated amount of linens and the intermittent services of pupil nurses, making extra charges for special diets, medicines, surgical dressings, electric fans, etc. Under such a plan, it is necessary for the patient to employ a special nurse (two for the average surgical operation) at \$6.00 a day and her board at \$1.50 per day.

It has therefore been found much more satisfactory in Trinity Hospital, and much more economical for the patient, to include all of these various items into one room charge which varies from \$7.00 to \$15.00 a day, according to the location of the room, the service being the same in all. For this daily room charge the patient is furnished with adequate nursing by graduate nurses day and night, medicines, dressings, electric fan, morning and afternoon daily papers, telephone and special diets. It is not necessary usually to employ a special nurse.

As it would be inequitable to charge a medical patient for the use of the operating room,

surgical and obstetrical patients are charged \$15.00 and \$10.00 respectively, which covers the use of the operating room or delivery room and of subsequent dressings, irrespective of the amount of material used. By employing a full time anaesthetist and various other economies, it is possible to charge only \$15.00 for an ethylene anaesthetic, which is very moderate in view of the high cost of ethylene. Ethylene is the routine anaesthetic except in special cases. A fee of \$5.00 is charged to cover the routine laboratory work and in the usual case is the total laboratory charge, irrespective of how many examinations are made. A special charge is occasionally made for those laboratory examinations which require an unusual amount of work.

Repeated comparisons of making hospital charges in the above manner with the various other methods in general use in this country seem to establish the desirability of the Trinity Hospital method. Not only from the hospital standpoint, with its lessened bookkeeping and elimination of dissatisfaction of patients over small items, has this been proven, but the method also enables the patient to obtain satisfactory hospital attention at a price which is considerably less than that encountered under other plans. This is evidenced by its growing popularity.

TRINITY HOSPITAL STAFF

J. I. Scarborough, M. D.; M. D. Ogden, M. D.; A. M. Zell, M. D.; O. K. Judd, M. D.; R. B. Moore, M. D., and S. T. W. Cull, M. D.

*This is the third of a series of articles. The fourth will appear in an early number.



ILETIN INSULIN LILLY

Iletin (Insulin, Lilly) was the first preparation of Insulin commercially available in the United States. It is backed by four and a half years of experience in research and production.

The Red Lilly has been linked with scientific medicine and quality products for a full half century.

In the minds of diabetic specialists in the United States the name Insulin is very closely associated with the name "Lilly."

On account of its uniformity in purity and unitage, Iletin (Insulin, Lilly) has given good results in the past and may be relied upon to give uniformly satisfactory results in the future. Iletin (Insulin, Lilly) is supplied in 5 cc. and 10 cc. vials: U-10, U-20, U-40.

Send for booklet.

Lilly



ELI LILLY AND COMPANY

THE BULLETIN

OF

Trinity Hospital

PUBLISHED UNDER THE DIRECTION OF THE STAFF

Vol. I

LITTLE ROCK, ARK., MARCH, 1927

No. 4

The Trinity Hospital Group*

Much has been written first and last about the group method of practicing medicine and all over this country groups have been born and have died with equal regularity. It is interesting therefore to analyze the known causes of this mortality.

Perhaps the most frequent cause of rupture is the dissatisfaction of the junior members of a group formed about one single individual as a nucleus, this dissatisfaction arising from either financial or professional sources. Another frequent cause is the inability to agree upon an equitable distribution of the income, as many members feel that their income would be much larger if practicing alone. An experience with this type of practice dating back to 1914 has proven several absolute requisites for the permanence of a group.

There should be no one dominating individual in a group and though the financial compensation of the different members will vary they should all have an equal voice in the determination of the policies and activities and no matter of major importance should be decided without the decision being unanimous. A majority rule is generally disastrous.

Another absolute essential is that the income of no member of the group should be affected by the amount of work done or the number of patients seen. This last insures the patient's receiving everything that the group has to offer and entirely removes the ease from any possible effects of self-interest. For instance, it often requires nicety of judgment to determine whether a certain case of uterine carcinoma requires surgery, deep x-ray therapy, radium or all three, and it is appar-

ent that, in an institution where all of these agents are equally available, the patient is more liable to receive what best suits her case if each member has the same financial interest in the case, irrespective of the method chosen.

Another cause of non-success in group medicine has been the lack of that personal responsibility which is so appreciated by the patient and which he looks to the family physician to supply. There is no reason why this personal touch should be lacking in any group. When the patient presents himself for diagnosis or treatment he should be in charge of some one member and this member should direct the various consultations and laboratory examinations, and, when all of the data concerning this case is in, correlate the findings and advise the patient with just the same sense of personal responsibility to which this patient has always been accustomed in his family physician.

Most physicians love their profession and their work in spite of its daily hardships and drudgery and it is odd therefore that in all of the discussions pro and con on group practice, no mention has ever been made of the pleasure in such work. By pooling facilities most of the drudgery can be eliminated. No books to keep, no bills to make out, no instruments to clean, all of these and more, together with the daily frank association with men equally interested in the work—some one to carry the burden during vacations and other absences, the weekly conferences, all of these make it almost unthinkable that one familiar with these advantages alone should even consider for a moment a return to individual practice.

TRINITY HOSPITAL STAFF

J. I. Scarborough, M. D.; M. D. Ogden, M. D.; A. M. Zell, M. D.; O. K. Judd, M. D.; R. B. Moore, M. D., and S. T. W. Cull, M. D.

*This is the fourth of a series of articles. The fifth will appear in an early number.

ILETIN INSULIN, LILLY



Iletin (Insulin, Lilly) was the first preparation of Insulin commercially available in the United States. It is backed by four and a half years of experience in research and production.

The Red Lilly has been linked with scientific medicine and quality products for a full half century.

In the minds of diabetic specialists in the United States the name Insulin is very closely associated with the name "Lilly."

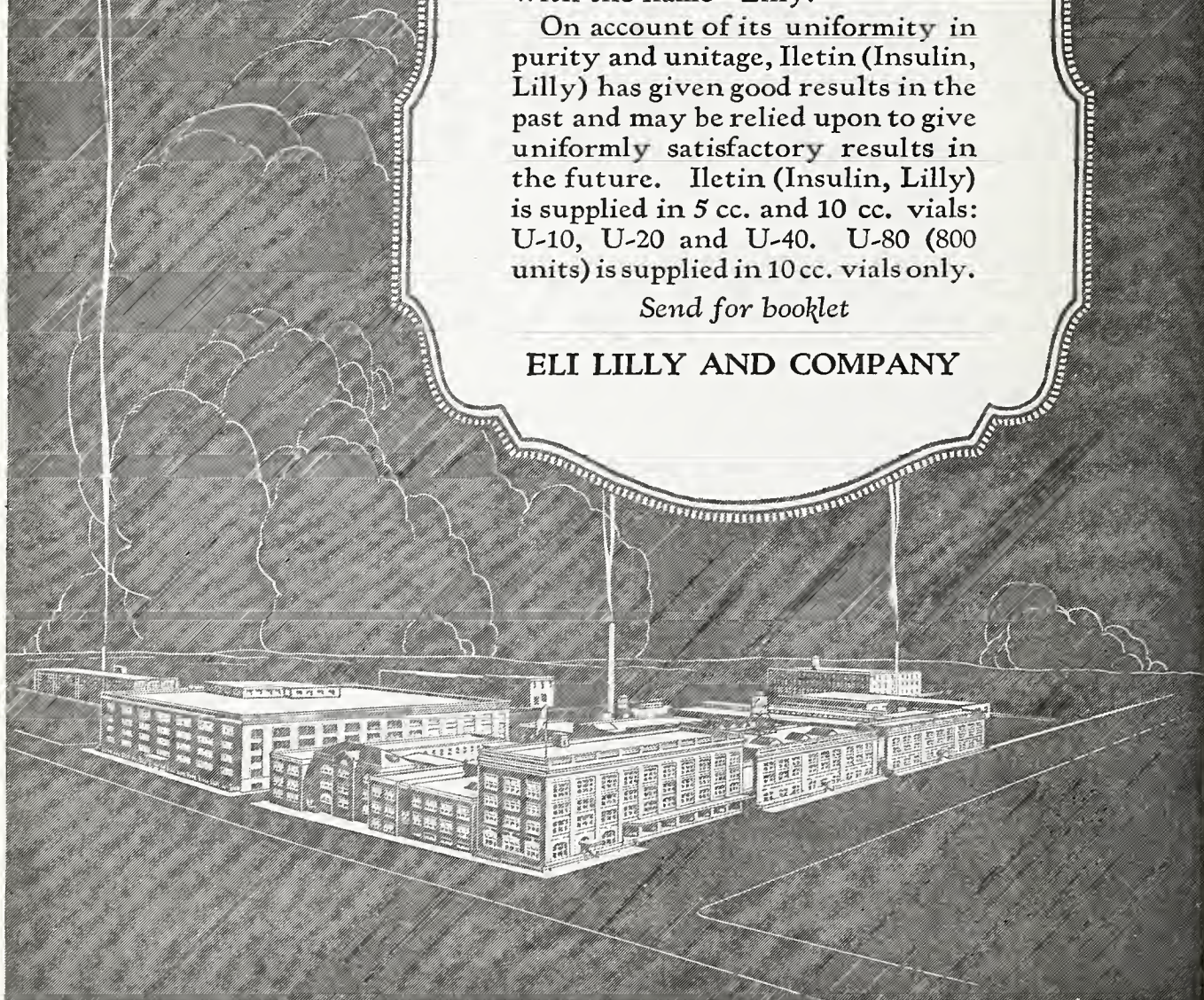
On account of its uniformity in purity and unitage, Iletin (Insulin, Lilly) has given good results in the past and may be relied upon to give uniformly satisfactory results in the future. Iletin (Insulin, Lilly) is supplied in 5 cc. and 10 cc. vials: U-10, U-20 and U-40. U-80 (800 units) is supplied in 10 cc. vials only.

Send for booklet

ELI LILLY AND COMPANY



Lilly



THE BULLETIN

OF

Trinity Hospital

PUBLISHED UNDER THE DIRECTION OF THE STAFF

Vol. I.

LITTLE ROCK, ARK., APRIL, 1927

No. 5

Maternity Department*

There is no class of patients, generally speaking, who are the objects of as much care and solicitude through a long period from their family and friends as the maternity cases, and properly so, for in these enlightened days it is well recognized, not only by the medical profession, but also by the laity, that intelligent supervision is productive of very tangible results, and this accounts for the fact that these patients are daily turning to organized maternity departments in hospitals for their prenatal care, their confinement and puerperium.

A hospital maternity department should be so organized that prenatal care begins as soon as the patient presents herself. She is given careful instructions as to diet and hygiene and is checked up at frequent intervals to determine that she thoroughly understands them. The frequent urinalyses, blood pressure readings and obstetric examinations are made and recorded where such records are easily accessible in the event of subsequent complications.

Since twilight sleep, as first advocated with morphine and scopolamine, has been abandoned in most of the institutions in this country, the safer ether and oil anaesthesia has been substituted with most satisfactory results. It is gratifying to watch these patients

rest comfortably throughout the first stage of a long tedious labor, especially the primiparas, sleeping at intervals, and then with the assistance of a small amount of nitrous oxide and oxygen come through the ordeal comfortably, painlessly and without that exhaustion so familiar to the obstetrician. In Trinity Hospital ether oil anaesthesia has proven most satisfactory.

Perhaps the most frequent dread in the mind of the prospective mother when considering a hospital is that her baby may be confused or substituted for some other woman's baby. This possibility is now entirely removed by the use of the name necklace which is placed on the infant and sealed before leaving the delivery room, thus making identification positive without possibility of error, and the mothers generally retain the necklace as a keepsake along with the baby's first shoes and other mementoes, a human trait as old as mothers themselves.

One little attention which has proven very popular with the Trinity Hospital mothers has been the presentation of a birth certificate on which are, in addition to the usual data, the footprints of the baby and the fingerprints of the mother, thus rendering possible the positive identification of both at any future time.

TRINITY HOSPITAL STAFF

J. I. Scarborough, M. D.; M. D. Ogden, M. D.; A. M. Zell, M. D.; O. K. Judd, M. D.; R. B. Moore, M. D., and S. T. W. Cull, M. D.

*This is the fifth of a series of articles. The sixth will appear in an early number.



In the Forefront of Biological Therapy

The early treatment of erysipelas with Erysipelas Antitoxin, Lilly, usually results in improvement of toxic depression, rapid fading of lesions and absorption of edema. Erysipelas Antitoxin, Lilly, is a council-accepted product, a purified, concentrated globulin. It is supplied through the drug trade in convenient syringe containers of 5,000 units-A-90. Send for literature.

ELI LILLY AND COMPANY
INDIANAPOLIS, U. S. A.

THE BULLETIN

OF

Trinity Hospital

PUBLISHED UNDER THE DIRECTION OF THE STAFF

Vol. I.

LITTLE ROCK, ARK., MAY, 1927

No. 6

Hospital Roentgenology*

It is a far cry from the time well within the memory of most practicing physicians when the crude X-ray coil was installed in some out-of-the-way place such as the basement or the attic in the hospital and operated intermittently for the diagnosis of some fractures, by any of the hospital personnel who happened to know which switch to throw, to the present day elaborate equipment occupying a well-lighted wing of the hospital and claiming more floor space than any other one department, under the direction of an expert roentgenologist who devotes his entire time to this complicated subject.

From the above mentioned primitive coil with its gas-filled tubes, the modern X-ray has progressed to a multiplicity of machines and devices. The gas tubes have been supplanted by Coolidge tubes which do not vary from day to day.

The patient is no longer alarmed by noisy motors and transformers, these having been placed in a distant basement and controlled from above.

The entire suite with its special machine devoted entirely to diagnostic work, a portable machine for use in the rooms of bed-ridden patients, and an enormous installation "stepping the current up" to 280,000 volts, with its various instruments of precision for accurate measurement, the developing room, the filing room where plates are kept indexed for instant reference for years, the heavy doors sheathed in lead, and the partitions instead of being made of plaster, built of barium sulphate and barium sand impervious to the most powerful X-ray—all of these do but hint at the marvelous development in this science.

It has followed then, as a matter of course, that clinicians have learned to lean very

strongly upon this branch for guidance and it is now very rare indeed that a conscientious diagnostician will give a positive opinion without the aid of the roentgenologist on such conditions as pulmonary tuberculosis, cholecystitis, peptic ulcer, chronic appendicitis, malignancies of the intestinal tract, hydro-nephrosis, renal calculus and many others too numerous to mention.

Serial pictures of the stomach taken at intervals of a few seconds reproduce what in effect is a moving picture of that viscus and often localize with marvelous accuracy gastric and duodenal ulcers. The roentgenologist not only now states that the patient has cancer of the stomach, but also in such cases advises the surgeon whether or not there is sufficient uninvolved stomach wall to permit of a resection.

The peculiar properties of sodium tetraiodophenolphthalein administered by mouth now picks out the gall-bladder from all of the other organs in the body and visualizes it under the X-ray, revealing inflammation and deformities which formerly could only be proven at operation or autopsy.

In conjunction with the cystoscopist the kidney is also visualized and not only stones but also dilatations and tumors are accurately outlined.

The earliest use of the X-ray was for the diagnosis of fractures and this has been extended until today fractures are reduced under the fluoroscope as a routine and unfavorable results almost eliminated.

Physicians and many laymen also have become accustomed to the knowledge that these diagnoses cannot be made in a day, many of them requiring several days of careful work and study for their completion.

TRINITY HOSPITAL STAFF

J. I. Scarborough, M. D.; M. D. Ogden, M. D.; A. M. Zell, M. D.; O. K. Judd, M. D.; R. B. Moore, M. D., and S. T. W. Cull, M. D.

*This is the sixth of a series of articles. The seventh will appear in an early number.



ILETIN (INSULIN, LILLY)

*The First Preparation of Insulin Commercially
Available in the United States; Five Years
on the Market; Pure—Stable—Uniform*



TETANUS ANTITOXIN, LILLY

*A Thoroughly Dependable, Highly Refined Anti-
toxin, Accurately Standardized, Small in Bulk,
An Improved and Convenient Syringe*



EPHEDRINE SULPHATE, LILLY

*For Topical, Oral, Subcutaneous and Intramuscu-
lar Use in Hay Fever, Asthma and Other Allergic
Affections; Physiological Dose Small; Action More
Sustained than Epinephrine
Supplied in Pulvules, Ampoules, Solution and
the Powdered Alkaloid*



Physicians' Inquiries Invited

ELI LILLY AND COMPANY

Research and Producing Chemists

INDIANAPOLIS, U. S. A.

Established 1876

THE JOURNAL

OF THE

Arkansas Medical Society

PUBLISHED MONTHLY UNDER THE DIRECTION OF THE COUNCIL

Vol. XXIV

LITTLE ROCK, ARK., JUNE, 1927

No. 1

Original Articles

BONE TUMORS: DIAGNOSIS AND TREATMENT*

By BARNEY BROOKS, M. D.

From the Department of Surgery, Vanderbilt University, Nashville, Tennessee.

The diagnosis and treatment of a tumor arising in a bone is often one of the most difficult problems presenting itself to a surgeon. There are two facts which are responsible for the existence of this difficulty of arriving at a definite conclusion as to the diagnosis and prognosis of any individual instance of bone neoplasm. First, the incidence of neoplastic disease of bone is not sufficiently great for any single individual to have large experience, particularly if he is not associated with some large medical center. Secondly, it is not generally appreciated that there are a great number of varieties of tumors of bone. In other organs as, for example, the female breast, the new growths are very clearly separated into two groups. One in which the tumors are definitely benign and another group in which the tumors are definitely malignant. There is no gradation from benignancy to malignancy. In neoplastic diseases of bone there are certain tumors which are definitely benign. There is neoplastic disease which is extremely malignant. Between these two extremes there are tumors of varying grades of relative malignancy. From this it is clear that in dealing with the diagnosis and treatment of bone tumors we are dealing with a disease in which the incidence is low and the variability is great.

From the pathological viewpoint bone tumors may be divided into three groups. In the first group may be placed those tumors which are clearly benign in that the neoplasm does not invade the surrounding tissues and does not produce distant metastases. In the second group may be placed those tumors which in-

vade the surrounding tissues and produce distant metastases. The third group of tumors invade the surrounding tissue, but do not metastasize to distant points. The division of bone neoplasms into these three groups is theoretically always easy, but practically is often difficult. There are, however, certain tumors whose pathological characteristics do not vary. The characteristic pedunculated osteo-chondroma, which originates near the ends of the long bones, does not form distant metastases or invade the surrounding tissue. The small round cell, or spindle cell, sarcoma which arises in the middle of the shaft of a long bone produces distant metastatic foci apparently almost coincident with the origin of the primary neoplasm. On the other hand, there are tumors of apparently the same gross and microscopical pathological characteristics which in one instance may produce distant metastatic foci and in another instance never be associated with distant metastases. This is particularly true of certain tumors composed of cartilage, connective tissue and bone. This same variability as regards the formation of metastases has been assigned to the well known medullary giant cell sarcoma although in my own experience I have never encountered an instance in which this tumor formed distant metastases.

From the clinical viewpoint, the classification of tumors is even more difficult. In general, it may be said that tumors arising from the periosteal surface of the shaft of a bone are very malignant while tumors arising in the marrow near the ends of bone are likely to be benign. Pain is also much more likely to be associated with malignant than benign tumors. The character of bone destruction or proliferation is also of some considerable importance in the determination of the nature of a bone neoplasm. Malignant tumors most frequently destroy bone in such manner as to produce an irregular worm-eaten appearance while benign tumors destroy bone by expansion or pressure absorption. The new bone formation associated with the growth of a malignant tumor is much less likely to show

*Read before the 52nd Annual Meeting of the Arkansas Medical Society, held in Little Rock, May 11, 12, 13, 1927.

any semblance to the normal bone architecture. Although these points are helpful in the diagnosis of the nature of a bone neoplasm they are by no means infallible.

The most important diagnostic procedure in determining the nature of a bone neoplasm is the gross and microscopical appearance of the tumor itself. The wisdom of carrying out the practice of biopsy for the determination of the nature of neoplastic disease is as yet a matter of dispute. In my own experience, I have no record of any instance in which biopsy of a bone tumor could in any way be interpreted as productive of harmful consequences. It is, therefore, my belief that the excision of a piece of tissue from a bone tumor for the purpose of determining the nature of the neoplasm is a procedure not associated with danger of dissemination of the disease. This belief is based on the fact that every patient who has been under my care, for what was apparently a malignant bone tumor and who has subsequently remained well for a period of three or more years, has had a piece of tissue excised for microscopical diagnosis previous to operative treatment. It is, therefore, my belief that tumors of bone are either of the metastasizing or non-metastasizing variety and that this property of the tumor is not in any way influenced by incision. This is a belief which is contrary to that expressed by others who have written concerning the diagnosis and treatment of bone tumors.

The method used, therefore, in making the diagnosis of neoplastic disease of bone is briefly as follows: The usual careful history is taken. Considerable importance is attributed to the existence of pain especially when it is the first symptom of the existence of disease. Strange to state, the onset of the symptoms with a pathological fracture has been more frequently present in our own experience with benign than malignant tumors. The influence of traumatism on the production of bone tumors is a disputed problem often of medico-legal interest. It is my belief that traumatism is not an important factor in the causation of neoplasm of bone. X-ray examination is, of course, of great value in the determination of the presence and nature of a tumor of bone. I remember distinctly two instances in which entirely satisfactory x-ray plates failed to show any change in the early stages of bone tumors. I have records also of two instances in which the X-ray appearance of bone lesions was interpreted as os-

teomyelitis previous to operation. The appearance of the bone lesions due to syphilis is often strikingly alike those of bone tumors. The knowledge gained from x-ray examination of bone neoplasms is, however, in the majority of instances of major importance in determining the presence and character of neoplastic disease. I wish particularly to emphasize the importance of securing several good plates from different positions.

In the majority of cases a definite diagnosis of the presence and the nature of bone tumors can be made from the history and x-ray examination. This is particularly true of the definitely benign tumors and the extremely malignant variety. In a considerable proportion of instances of tumor of bone, the final diagnosis must rest upon the gross and microscopical appearance of the tumor itself. In all instances in which doubt exists as to the presence of, or nature of, a bone tumor, an exploratory incision with removal of tissue for diagnosis is resorted to. In most instances in which this procedure has been found necessary it has not been deemed wise to depend upon the gross pathological appearance and the examination of a frozen microscopic section. We have rather felt that the tissue removed should be prepared for microscopical examination by the longer, but more satisfactory methods. This, of course, results in the lapse of an interval between the biopsy and the subsequent decision as to the treatment of the disease. In all instances in which this method of procedure has been followed, we have not had any cause for regret. In some instances in which the clinical data and the gross pathological appearance have been almost conclusive of the nature of the neoplasm present, we have made use of frozen sections and have proceeded with the operative treatment immediately after the examination of the tumor by exploratory incision.

It is our belief that every possible means of determining the exact nature of a bone neoplasm should be used before arriving at a definite conclusion of the treatment to be instituted. This method of procedure will some times result in the surgeon being able to avoid the useless sacrifice of an extremity.

As regards the treatment of bone tumors, it is impossible to do more than establish certain very general principles. The interpretation of the details of application of these general principles must be applied to each individual case. There are instances in which amputa-

tion is the correct surgical treatment for a perfectly benign tumor and there are instances in which the local removal of a malignant tumor is the method of choice. In general, it may be said that the ultimate prognosis as regards the tumor is dependent on the nature of the tumor rather than the type of operation performed. The prognosis as regards function obviously depends on the type of operation performed rather than the nature of the tumor. It is, of course, understood that the cure of any bone tumor is dependent on its complete extirpation.

If it were possible in all instances to determine the exact pathological characteristics of a bone tumor, the choice of the method of the surgical treatment would not be difficult. From the study of these instances of bone tumor which have come under my observation, I feel that in the majority of instances the careful application of our present methods of study will permit of an accurate diagnosis and prognosis. There still remain, however, a certain considerable proportion of instances in which the prognosis is a matter of conjecture. In those instances which present the characteristic findings of periosteal sarcoma, the ultimate prognosis is absolutely bad. In my own experience none of these cases have survived for a period greater than two years after the initial onset of the disease. In every instance in which the tumor belongs to the definitely benign group, the ultimate prognosis is good. This group includes the juxta-epiphyseal chondroma, the benign bone cyst and the medullary giant cell sarcoma. If the tumor arises in the substance of ends of bones the prognosis is more likely to be doubtful. Also the prognosis of the tumors containing myxomatous or cartilaginous tissue is doubtful. These tumors are particularly likely to recur locally even if they do not produce distant metastases.

In an individual in which the diagnosis of periosteal sarcoma can be definitely made, I am inclined to believe that radical removal of the tumor is hardly justified, and I am inclined to give palliative treatment with x-ray unless the patient can be made more comfortable by operative treatment. In all other instances, I believe the nature of the operation to be performed should be determined by the functional result to be obtained. If the tumor can be excised locally with the preservation of a good functional extremity, this is the method of choice. The complete local excision of a

bone tumor accomplishes all that could be accomplished by a radical operation.

A HIGH FAT, RICH VITAMIN DIET IN ULCERS OF THE STOMACH AND DUODENUM*

By SEALE HARRIS, M. D., Birmingham, Ala.

The ulcer patient should have the benefit of what McCollum calls our "newer knowledge of nutrition." His diet should be adjusted to his particular needs, not only as related to the proper amounts and proportions of proteins, carbohydrates, fats and minerals, but its vitamin content should also be balanced. In ulcers of the stomach and duodenum a relatively high fat diet seems best to meet the indications for the treatment of the local pathological conditions, while food rich in vitamins will build up the general state of nutrition so that the ulcer will heal and the patient become more resistant to infections of the gastro-intestinal tract.

It manifestly is not advisable to give the plethoric ulcer patient weighing 200 pounds the same diet as the undernourished 100-pound individual. The nutritional needs of the patient who has had a recent hemorrhage differ from those of the person who voluntarily leaves his work for ulcer treatment. The adolescent ulcer patient needs a relatively higher protein diet than the adult over fifty. In many other respects the personal equation cannot be overlooked in dieting ulcer patients. These considerations seem to be lost sight of by most physicians in dieting their ulcer patients.

There are almost as many diets employed in treating ulcers of the stomach and duodenum as there are clinicians specializing in gastro-intestinal diseases. Most of the diets which are used as a routine by the medical profession generally, are modifications of the Lenhartz diet, though they are given the names of various men who have popularized them. It seems to be the usual thing to try to make a diet fit all ulcer patients, instead of preparing daily menus to suit the nutritional needs of each individual case. In other words, it appears to be the rule that when a physician makes a diagnosis of ulcer, he gives his patient someone of the diets as published

*Read before the 52nd Annual Meeting of the Arkansas Medical Society, held in Little Rock, May 11, 12, 13, 1927.

in text-books without considering the patient's age, weight and general condition, or even the variable pathological states of the ulcer-bearing stomach or duodenum.

FAULTY ROUTINE DIETS

In giving these routine diets no thought seems to be given as to whether the patient is receiving an excess, or a deficiency, of protein, carbohydrates and fats; and no regard is given to the vitamin content of food. These routine diets that are given indiscriminately to ulcer patients are not always harmful immediately, though the Sippy (1) diet for the first week contains a dangerously high ratio of fats to carbohydrates. Most of them, after the second week, contain an excess of proteins and carbohydrates and a deficiency of vitamins B and C; hence untoward remote results may occur from their prolonged use. The least criticism that can be made of the practice of routine dieting in ulcer is that it is unscientific. It is almost as important that the diet in gastric and duodenal ulcers should be arranged to meet the needs of each individual patient, as it is in preparing the daily menus for diabetics.

It must be admitted, however, that many ulcer patients will get well clinically on any one of the ulcer diets provided he rests in bed for three or four weeks. It is also unquestionably true that many ulcers heal spontaneously without any effort at dieting, or at least heal to the extent that there are remissions of symptoms for weeks and months at a time. Nevertheless, a larger percentage of permanent cures of ulcer result when scientific methods are instituted for preparing daily menus suited to the nutritional needs of each individual patient.

SMALL FREQUENT FEEDINGS FOR FIRST WEEK

Partial physiological rest to the stomach activities and complete physical rest for the patient is indicated in the first two or three weeks in the treatment of ulcer. Lenhartz (2) advised half-ounce feedings of an egg and milk mixture every hour from 7:00 A. M. to 7:00 P. M., increasing the amount by half-ounce each day until, in six days, hourly three-ounce feedings are given. We think it better to consider the patient's habitual hours for meals and the feedings should be begun and ended about the time for his morning and evening meals, provided his hours for eating do not need regulating. Eight o'clock being

the average we usually begin the feedings at that hour and end them at seven in the evening. If the patient's vocation requires him to begin work early, the first feeding is at 6:00 or 7:00 A. M. and the last ten hours later.

The so-called "abstinence cure" formerly used by Ewald (3) and its modifications by Von Luebe and others, called for a period of absolute rest to the stomach varying from three or four days to two weeks, while an attempt was made to nourish the patient by nutrient enemata. It has been definitely provided that the fasting stomach is not at rest if enemata are given and only a few hundred calories at most can be obtained from rectal alimentation with predigested egg and milk mixtures. Aside from the fact that feeding by rectum does not properly nourish the ulcer patient, few persons are willing to submit to treatment if they are told that they have to abstain from food by mouth for a few days. The small frequent feedings advocated by Lenhartz are more agreeable to the patient and promote healing by building up nutrition; and it is probable that they provide as much food as can be digested and assimilated.

More recently Coleman (4) advocated a period of three or five days fasting for the stomach while he nourished the patient with glucose enemata. Throughout his treatment Coleman gives daily feedings per rectum of 90 to 100 grams of glucose, the only food which he gives by mouth being egg-white and olive oil or cream. Undoubtedly a sufficient amount of carbohydrate may be absorbed from the colon for the patient's glucose needs, provided conditions are favorable; but many patients cannot retain nutrient enemata, and one cannot estimate with any degree of accuracy the amount of carbohydrate absorbed from the colon. Coleman's diet is also deficient in vitamins B and C and in calcium, iron, and other minerals needed for perfect nutrition.

Some of the modifications of the Lenhartz diet, notably that of Sippy, begin with three ounces of food every hour. This would seem to overload the stomach, which accounts for the need of using the tube for aspirating the stomach contents during the night. Beginning with half-ounce hourly feedings for ten hours and increasing the quantity by half ounce each day, with a maximum of three ounces in six days, it is rarely necessary to employ the stomach tube at night, as is the practice in the Sippy treatment.

THE USE OF FATS TO PROTECT THE ULCER

Lenhartz gave a high protein diet to "bind" the acid secreted by the stomach on the theory that it prevented the irritating effect of the gastric hyperacidity upon the ulcer. Rehfuß has demonstrated that proteins do not bind the free hydrochloric acid in the stomach but, on the contrary, his highest acid readings were after feeding proteins. It, therefore, would seem that Lenhartz's high protein diet in ulcer was based upon a mistaken conception of gastric function. Rehfuß's observations also seem to prove that the time-honored custom of prescribing meats, eggs, and other food of high protein content, in gastric hyperacidity, should be abandoned.

In my original modification of the Lenhartz diet, first employed in 1906, Conheim's theory of a deficiency of gastric mucus in ulcer was considered; and cream was added to the Lenhartz formula with the idea of keeping the ulcer coated with milk fat, thus protecting it from the irritating effects of the excess of hydrochloric acid usually present in the stomach contents of the ulcer patient. Conheim gave olive oil to ulcer patients, claiming that it promoted healing of the ulcer by protecting the exposed nerve terminals in the open ulcer. It seemed to me that milk fat would have the same effect.

Some patients objected to the raw egg mixed with the milk and cream mixture in our modifications of the Lenhartz diet; and for the past few years we have been omitting the egg. We find that the higher fat diet relieves the pain better than when the first few days' feedings contained eggs, and that the patient makes more rapid clinical recovery. In 1906 we knew nothing about vitamins, but it is known now that milk fat is rich in vitamin A, while there are no vitamins in olive oil. The addition of the cream to the milk, therefore, not only adds to the palatability of the food formula, but is soothing to the ulcer and increases the general nutrition of the patient.

THE LOW CARBOHYDRATE DIET IN ULCER

Deeks (5) in 1904, expressed the opinion that a diet excessive in sugars is the most important etiological factor in ulcer, hyperchlorhydria and other gastric disorders. He therefore, gave his patients a low carbohydrate diet and reported excellent results. Whether or not Deeks is right in his theory, all authorities on nutrition agree that the average American diet contains a great ex-

cess of carbohydrates; and since most patients develop ulcer on a diet rich in bread, sweets, rice and potatoes, it would seem advisable to change their eating habits. We, therefore, have followed the suggestion of Deeks in using a low carbohydrate diet in treating ulcer; and believe that we have been getting better results since adopting that method.

In giving a low carbohydrate and relatively high fat diet in ulcer it should be remembered that "fats burn in the fire of the carbohydrates;" and the ketogenic-anti-ketogenic ratio of Woodyatt, *i. e.*, 1 of carbohydrate to 1.5 of fats (in grams) should be considered in dieting any individual. A higher proportion of fats may result in a mild acidosis, particularly if there is impairment of the islet function of the pancreas, which on account of the anatomical relations of the pancreas to the stomach and duodenum, probably is not infrequent in ulcers of the stomach and duodenum. The proportion of one-third carbohydrates to two-thirds fats by calories as used by us is not nearly so high a fat diet as the Marsh Newberger diet in diabetics. When translated into grams the ketogenic-anti-ketogenic ratio in our diets averages at least 1.5 of carbohydrates to 1 of fat. The Sippy (6) diet for the first week, *i. e.*, one and one-half ounces of cream and one and one-half ounces of milk every hour for thirteen feedings a day, would give 199 grams (1,791 calories) fat, 24 grams (64 calories) carbohydrate and 17.5 grams (70 calories) protein, a ketogenic-anti-ketogenic ratio of about 1 to 4. This is entirely too much fat to give in one day; too high a ratio of fat for even a normal person and a dangerously high fat diet for an individual with a damaged pancreas. We recently have had two cases of ulcer of the stomach in which the urine showed a high degree of acetone and diacetic acid when the patients were consuming about one-fourth the amount of fat as in the first few days of the Sippy diet. It is probable that a high degree of acidosis would have followed in these patients had they received the routine Sippy diet for the first week.

PROTEINS

It would seem rational in dieting ulcer patients to give no more protein than is needed for daily nutrition. Chittenden's experiments seem to show that the normal adult needs only about one-tenth of his total amount of food, expressed in calories, in proteins. Others, particularly the Germans, think a higher pro-

portion is necessary, some ranging as high as one-seventh. It is generally agreed, however, among nutrition experts, that the average well-nourished person needs no more than 75 grams (300 calories) of protein a day. In estimating our diets for ulcer patients we give the average person over fifty years of age, 60 grams of protein daily, while young, vigorous adults are given 75 to 80 grams. While ulcer is rare in adolescence it does occur under twenty and, if so, 100 or more grams of protein may be given a day. After hemorrhage, or if the patient is anemic, it is advisable to give 100 or even 120 grams of protein a day. The Lenhartz ulcer diet containing 120 grams of protein a day was originally intended for use after hemorrhage and the results were so good that it was used by him and others routinely for all ulcer patients. In dieting the ulcer patient after a hemorrhage, we use the "Seale Harris modification of the Lenhartz diet" adjusted to meet the caloric needs of the individual under treatment.

DIET FOR THE FIRST TWO WEEKS

We began the diet of ulcer patients by giving on the first day, one-half ounce (15 c. c.) of milk (two-thirds) and cream (one-third) mixture, and increase one-half ounce each day until in six days three ounces are given every hour from 8:00 A. M. to 7:00 P. M. The proportion of two parts of milk to one of cream is maintained in all the feedings for the first two weeks. One-half ounce of strained orange juice is given at 9:00 P. M. increasing the amount by one-half ounce each day until, in six days, three ounces are given daily.

From the seventh to tenth day, the diet is still under the basal requirements. The three-ounce feedings are given every two hours instead of at hourly intervals with the addition of four tablespoonfuls of strained oatmeal or one-half shredded wheat biscuit, or a thin slice of whole wheat bread dry toast for breakfast and supper and one ounce scraped beef and one thin slice of white wheat bread dry toast for dinner.

From the eleventh to the fourteenth day, the diet is increased by giving a soft cooked egg for breakfast and supper and increasing the scraped beef to two ounces or substituting minced breast of chicken for dinner.

BASAL DIET DURING THIRD WEEK

Beginning the third week and so long as the patient is in bed, he is given his basal diet,

unless he is underweight, then the amount of milk and cream is increased; or if he is overweight, then the amount of milk and cream is reduced so that his own fat will be burned. If he is anemic the proteins are increased.

The basal diet in calories is calculated by multiplying the bodyweight in kilograms by 25, the number of calories needed daily per kilogram of body-weight while the patient is at rest in bed. Thus the ulcer patient weighing 154 pounds (70 kilograms) would require 1,750 calories a day. Of this, 60 grams (240) calories should be of protein and the remainder (1,510) should be divided into one-third (504) calories, carbohydrates and two-thirds (1,006 calories) of fats; or translated into grams, 128 grams of carbohydrates and 111.6 of fats.

If an increase in carbohydrates is desired it is easily made by adding to the basal diet enough milk, sugar or bread to make up the required number of grams. If the fat requirement is higher or lower than the basal diet, the cream or butter is increased or reduced; and if there is anemia, enough scraped beef or cheese is added to meet the estimated amount of protein for the patient's daily needs.

OPTIMAL DIET AFTER THIRD WEEK

Beginning when the ulcer patient has completed his three weeks' rest in bed his optimal diet should be given, *i. e.*, the amount needed to maintain his strength and his normal weight while attending to his daily duties. The amount needed depends upon the amount of physical exertion performed in the day. It is estimated that the average business man or professional man, or the housewife, requires about 35 calories per kilogram of body-weight. Thus the optimal diet for the adult of average height and weight, 154 pounds (70 kilograms) would be 70 times 35, 2,450 calories. Of this, 10 per cent, 245 calories (61 grams), should be proteins and of the remaining 2,205 calories, one-third, 735 calories (183.5 grams) is carbohydrate and two-thirds, 1,470 calories (163.3 grams) in fats.

The laborer employed in hard work will require 50 calories per kilogram per day. Thus the bricklayer or the farmer or the golfer who plays eighteen holes a day will need about 3,500 calories, divided as follows: 10 per cent, 350 calories (87.5 grams) protein and of the remaining 3,150 calories, one-third 1,050 calories (262.5 grams) in carbohydrates and 2,100 calories (233.3 grams) fat.

The ulcer patient's optimal diet should be continued for a year or more. It is not necessary for him to weigh and measure his food as may be done if he is in a hospital, but during the fourth week of treatment he may be taught to estimate his diet so that he may order a meal in a restaurant or at home, containing approximately the proper amounts of proteins, carbohydrates, and fats. It is not possible even when food is weighed and measured to tell exactly the number of calories of protein, carbohydrates, and fats that some items contain; and since the organs concerned with digestion and nutrition normally have a wide range in function an error of 300 or 400 calories a day is not of moment.

The ulcer patient should weigh himself once a week. If he gains above his normal weight, cream and butter should be reduced; or if he is losing on his calculated optimal diet, a condition of infrequent occurrence, the diet may be increased until he is up to standard weight.

VITAMINS A AND B

The recent advances in the study of nutrition have brought out some amazing facts, which should be applied in the treatment of ulcer. Without going into a discussion of the proven facts regarding vitamins, it is an accepted conclusion by nutrition experts that vitamin A, protects against respiratory and eye infections, and that it stimulates nutrition generally.

It would, therefore, seem that in dieting an ulcer patient the general nutrition of the patient should be considered and that his diet should be rich in vitamin A. Milk fat (cream, milk and butter) is the best source of vitamin A, though the green vegetables which should make up an important part of an ulcer diet after the first week are rich in this protective food.

No one doubts that the anti-neuritic vitamin protects against beriberi; and McCollum thinks that there are hundreds of thousands of border-line cases of nervous maladies that occur because of a deficiency of vitamin B in the diet of the average American. The neurotic element, as a predisposing factor in the etiology of ulcer is accepted by many gastro-enterologists; and since vitamin B is essential for perfect nutrition of the nervous system, whole wheat bread, vegetables and fruits, important sources of vitamin B, should be part of the diet of ulcer patients.

The removal of the adrenals in animals is frequently followed by the development of duodenal ulcer. It is known that in fatigue there is a deficiency of adrenal secretion and the injection of adrenalin relieves fatigue. McGarrison is of the opinion that vitamin B is necessary for proper adrenal function. There is also evidence suggesting that a deficiency of vitamins affect thyroid and other internal secretions. It therefore seems that since the general use of white flour, white meal, white rice, and white sugar are all devoid of vitamins, a deficiency of vitamin B in the average diet may have something to do with the apparent increase of duodenal ulcer during the last few decades.

VITAMIN C PROTECTS AGAINST ABDOMINAL INFECTION

The anti-scorbutic vitamin C, seems not only to protect against the disease known as scurvy, but against infections of the entire intestinal tract. McGarrison a British Army Surgeon, stationed in a remote region of the Himalayas, observed that the natives, though they are ignorant and live under most unsanitary conditions, rarely had gastro-intestinal or other abdominal infections. In a surgical practice of more than 400 major operations a year for nine years, he did not observe a case of gastric or duodenal ulcer, of appendicitis, gallbladder or other infection of the abdominal viscera. He studied the eating habits of the natives and came to the conclusion that the "natural" foods on which they lived protected them against abdominal infections. He made experiments on monkeys, feeding them on autoclaved white rice. Practically all of them developed gastro-intestinal infections, while the control monkeys fed on milk, fruits, nuts and leafy vegetables, remained healthy.

It is an accepted fact that the exciting cause of peptic ulcer is an infection, though the predisposing cause is not always apparent. McGarrison's observations suggest that lowered resistance from a diet deficient in vitamins is an important factor in the etiology of peptic ulcers and other abdominal diseases in which infection plays a part. It, therefore, would seem advisable for the ulcer patient to have a diet rich in vitamin C, with the view not only of aiding in healing the ulcer, but also to keep him, as nearly as possible, in a state of perfect nutrition to prevent recurrences of the infection.

Fruit and raw vegetables are the best sources of vitamin C; and since it has been proven that they do not increase gastric acidity, there is no good reason why strained orange juice, or strained tomato juice, or the strained juice of other uncooked fruit and vegetables should not be begun early in the diet of the ulcer patients. Patients always like orange juice, it rarely disagrees, and there is no good reason why it may not be given on the first day of treatment of ulcer cases. The first six days, we give one feeding at 9:00 P. M. of the same quantity, from one-half to three ounces, of orange juice with the milk and cream mixture. After the first week, orange juice, three ounces, is given with breakfast, and three ounces strained tomato juice with the evening meal. Since the heat necessary for canning tomatoes does not destroy vitamin C, if fresh tomatoes are not available the strained juice from canned tomatoes may be used. Some patients do not like tomato juice, but when told that it is both food and medicine, they take it and soon cultivate the taste for it. It is sometimes necessary to prove to the patient that the old idea of acid fruits and acid vegetables being incompatible with milk is a fallacy; but a few feedings of orange or tomato juice with meals made up largely of milk and cream, soon convince them that there is no such incompatibility.

DIET FOR THE AVERAGE ULCER PATIENT WEIGHING 154 POUNDS (70 Kilograms)

It is not possible to prepare a diet suitable for all ulcer patients; but it is practicable to construct daily menus for the average ulcer patient, which may be modified, if necessary, to meet the varying nutritional needs of the individual under treatment. We use the diets outlined in the tables for the average ulcer case. It is so constructed that it may easily be changed, increasing or decreasing the amounts of carbohydrates, proteins and fats to meet the estimated requirements in any given case.

DIET AFTER SIX WEEKS

After the sixth week and for a year thereafter the ulcer patient should be kept on his

optimal diet. It should be bland and soothing and also rich in vitamins to protect against future infections. During the four or six weeks he is under the direct observation of his physician he can be taught what he may eat and what are the forbidden foods. He also should learn the amounts of protein, carbohydrates, and fats that he will need to maintain his normal weight and efficiency. We find it easy to teach food values to persons of average intelligence. They soon learn, without weighing or measuring their food, to estimate with reasonable accuracy for quantities of the various food in portions of 50 and 100 calories. They learn in a few days about the proportions of protein, carbohydrates, and fats in the things which they eat, as well as the vitamin content of various foods. Instead of it being a burden to estimate food values at meals, it adds to the interest and enjoyment of eating for one to have a working knowledge of the principles of diet and nutrition.

THE PERSONAL HYGIENE OF RECOVERED ULCER PATIENTS

The ulcer patient while undergoing treatment should be taught good eating habits. He should be shown the necessity of thorough mastication and that the use of peppers, spices and condiments is an acquired and wholly unnecessary habit which the ulcer patient should avoid. Hot biscuit, fresh rolls, and corn bread with tough crust, fried foods, pies, pastries, cakes and syrup should be eliminated from the dietary of the ulcer patient. Likewise tough meats, green corn, strawberries and other berries; fruits with tough skins and vegetables with woody fibre, like old okra, and asparagus should be taboo. Coffee, tea, caffeine beverages, wines, beer, whiskey, or other alcoholics, since they increase the gastric acidity, should not be used by the recovered ulcer patient. Tobacco should also be interdicted.

It is not enough to tell the ulcer patient in general terms of the foods which he should eat or which he must not take; he should be given

a diet list with specific instructions regarding the portions of the various dishes for each meal. The patient should also be taught that perfect digestion depends not only on having the proper quantity and quality of food, but that many other factors as overwork, worry, fear, anger, grief and other emotional disturbances may predispose to ulcer. In other words, he should be taught personal hygiene particularly as applied to his individual ease.

1. Sippy, B. W. "Musser and Kelly's Practical Treatment." W. B. Saunders Co. 3:336—1912.

2. Friedenwald-Ruhrah. "Diet in Health and Disease." P. 449. W. B. Saunders Co.

3. Osler-McRae. "Modern Medicine." Lea and Febinger. Philadelphia. III, 194-195.

4. Coleman, Warren. "A New Diet for Peptic Ulcer." J. A. M. A., Vol. 83, No. 12, pp. 885-888.

5. Deeks, W. E. "The Carbohydrates as Etiological Factors in Stomach Disorders." N. Y. Med. Journal, June 2, and June 25, 1904.

6. "Diet in Health and Disease." P. 454. W. B. Saunders Co., 1919.

TABLE I
FIRST, SECOND AND THIRD DAY

AMOUNT			FOOD VALUE					VITAMINS		
gms.	oz.	tbsp.	FOOD	ch.	prot.	fats	eals.	A	B	C
First Day.										
7:30 A. M.										
15	½	1	Strained orange juice	1.7	0	0	.....	0	xxx	xxx
	½	1	Every hour from 8:00 A. M. to 6:00 P. M. ½ oz. mixture of 2½ oz. cream to 4 oz. milk—11 feedings	6.6	6.6	23.1	.....	xxxx	xxx	xx
8:00 P. M.										
15	½	1	Strained orange juice	1.7	0	0	.....	0	xxx	xxxx
Total for first day.....				10.0	6.6	23.1	274			
Second Day.										
7:30 A. M.										
30	1	2	Strained orange juice	3.4	0	0	.....	0	xx	xxxx
30	1	2	Every hour from 8:00 A. M. to 6:00 P. M. give 1 oz. of a mixture of 4 oz. cream and 7 oz. milk—11 feedings	13.6	11.9	43.7	.....	xxxx	xxx	xx
8:00 P. M.										
30	1	2	Strained orange juice	3.4	0	0	.....	0	xx	xxxx
Total for second day.....				20.4	11.9	43.7	523			
Third Day.										
7:30 A. M.										
45	1½	3	Strained orange juice	5.1	.4	.1	.....	0	xx	xxxx
45	1½	3	Every hour from 8:00 A. M. to 6:00 P. M. (inc.) 1½oz. of a mixture of 5½ oz. of 30% cream and 11 oz. milk	20.9	18.2	61.6	.....	xxxx	xxx	xx
8:00 P. M.										
45	1½	3	Strained orange juice	5.1	.4	.1	.....	0	xx	xxxx
Total for third day.....				31.1	19.0	61.8	757			

TABLE II
FOURTH, FIFTH AND SIXTH DAY

AMOUNT			FOOD VALUE					VITAMINS		
gms.	oz.	tbsp.	FOOD	ch.	prot.	fats	cals.	A	B	C
Fourth Day.										
60	2	4	Every hour from 8:00 A. M. to 7:00 P. M. (inc.) 2 oz. of a mixture of 8 oz. 30% cream and 16 oz. whole milk—total for 12 feedings	28.0	25.2	87.8	.....	xxx	xxx	xx
9:00 P. M.										
60	2	4	Strained orange juice	7.0	.5	.1	.....	0	xxx	xxxx
Total for fourth day.....				35.0	25.7	87.9	1034			
Fifth Day.										
75	2½	5	Every hour from 8:00 A. M. to 7:00 P. M. (inc.) 2½ oz. of a mixture of 10 oz. of 30% cream and 20 oz. whole milk—total for 12 feedings	25.1	27.3	114.0	.....	xxx	xxx	xx
9:00 P. M.										
75	2½	5	Strained orange juice	8.7	.6	.2	.....	0	xxx	xxxx
Total for fifth day.....				33.8	27.9	114.2	1275			
Sixth Day.										
90	3	6	Every hour from 8:00 A. M. to 7:00 P. M. (inc.) 3 oz. of a mixture of 12 oz. of 30% cream and 24 oz. of whole milk—total for 12 feedings	42.2	32.8	136.8	.....	xxx	xxx	xx
9:00 P. M.										
30	3	6	Strained orange juice	10.4	.7	.2	.....	0	xxx	xxxx
Total for sixth day.....				52.6	33.5	137.0	1577			

TABLE III
SEVENTH, EIGHTH, NINTH AND TENTH DAY

AMOUNT			FOOD VALUE					VITAMINS		
gms.	oz.	tbsp.	FOOD	ch.	prot.	fats	cals.	A	B	C
Seventh Day.										
8:00 A. M.—Breakfast.										
90	3	6	Strained orange juice....	10.4	.7	.2	.....	0	xxx	xxxx
90	3	6	Strained oatmeal or ½ shredded wheat biscuit toasted or							
20	(1 thin slice)		Dry toast or whole wheat bread	10.0	1.8	.1	.....	0	0	0
90	3	6	Cold or hot milk.....	4.3	2.7	3.6	.....	xxx	xxx	xx
60	2	4	30% cream.....	1.3	1.5	18.0	.....	xxx	xx	?
			1 soft boiled egg.....	0	6.0	6.0	.....	xxxx	xx	0

10:00 and 11:00 A. M.										
90	3	6	3 oz. of a mixture of 2 oz. of 30% cream, 4 oz. whole milk—total for 2 feedings	7.1	5.5	22.8	.....	xxx	xxx	xx
1:00 P. M.—Dinner.										
25	1		(1 large) Scraped beef, lightly broiled (1 round tablespoonful) .....	.0	5.4	1.0	.....	x	x	x
90	3		Whole milk.....	4.3	2.7	3.6	.....	xxx	xxx	xx
30			(1 slice) Whole wheat bread, toasted.....	13.3	2.9	.3	.....	xx	xxx	0
3:30 and 5:00 P. M.										
90	3	6	3 oz. of a mixture of 2 oz. of 30% cream and 4 oz. whole milk—total for 2 feedings	7.1	5.5	22.3	.....	xxx	xxx	xx
7:00 P. M.—Supper.										
90	3	6	Strained orange juice....	10.4	.7	.2	.....	0	xxx	xxxx
90	3	6	Strained oatmeal or ½ shredded wheat biscuit toasted, or							
20	(1 thin slice)		Dry toast of whole wheat bread	10.0	1.8	.1	.....	0	0	0
90	3	6	Cold or hot milk.....	4.3	2.7	3.6	.....	xxx	xxx	xx
60	2	4	30% cream.....	1.3	1.5	18.0	.....	xxx	x	?
			1 soft boiled egg.....	.0	6.0	6.0	.....	xxxx	xx	0
Total				83.8	47.4	106.3	1482			

TABLE IV
ELEVENTH, TWELFTH, THIRTEENTH AND FOURTEENTH DAYS

AMOUNT			FOOD VALUE				VITAMINS			
gms.	oz.	tbsp.	FOOD	ch.	prot.	fats	cals.	A	B	C
8:00 A. M.—Breakfast.										
			1 soft boiled egg.....	0	6.0	6.0	.....	xxxx	xx	0
30	(1 thin slice)		Whole wheat bread, toasted	14.5	2.9	.3	.....	xx	xxx	0
10	(1 pat)		Butter.....	0	.1	8.5	.....	xxxx	0	0
90	3	6	Orange juice strained	10.4	.7	.2	.....	0	xxx	xxxx
90	3	6	Strained oatmeal or ½ shredded wheat biscuit or 1 thin slice whole wheat bread (20 gms.)	10.0	1.8	.1	.....	xx	xxx	0
30	1	2	Cream, 30%.....	.6	.8	9.0	.....	xxx	x	?
9:00 A. M.										
45	1½	3	Cream, 30% .....	.9	1.1	13.5	.....	xxx	x	?
120	4	8	Whole milk.....	5.8	4.0	4.8	.....	xxx	xxx	xx
11:00 A. M.										
45	1½	3	Cream, 30% .....	.9	1.1	13.5	.....	xxx	x	?
120	4	8	Whole milk.....	5.8	4.0	4.8	.....	xxx	xxx	xx
1:00 P. M.—Dinner.										
50	2	(2 large)	Scraped beef or minced breast of chicken .....	.0	10.0	3.0	.....	x	x	x
30	(1 slice)		Dry toast, whole wheat	13.3	2.9	.3	.....	xx	xxx	0
10	(1 pat)		Butter.....	0	.1	8.5	.....	xxx	xxx	xx
60	2	(2 rounded)	Ice cream.....	11.8	2.3	8.2	.....	xxx	xxx	xx

3:00 P. M.										
45	1½	3	Cream, 30% .....	.9	1.1	13.5	.....	xxx	x	?
120	4	8	Whole milk.....	5.8	4.0	4.8	.....	xxx	xxx	xx
5:00 P. M.										
45	1½	3	Cream, 30% .....	.9	1.1	13.5	.....	xxx	x	?
120	4	8	Whole milk	5.8	4.0	4.8	.....	xxx	xxx	xx
7:00 P. M.—Supper.										
			1 soft boiled egg.....	0	6.0	6.0	.....	xxxx	xx	0
30	(1 slice)		Whole wheat bread,							
			toasted	13.3	2.9	.3	.....	xx	xxx	0
10	(1 pat)		Butter.....	0	.1	8.5	.....	xxxx	0	0
90	3	6	Orange juice strained	10.4	.7	.2	.....	0	xxx	xxxx
Total				111.1	57.7	132.3	1855			

TABLE V
FIFTEENTH, SIXTEENTH, SEVENTEENTH, EIGHTEENTH, NINETEENTH, TWENTIETH
AND TWENTY-FIRST DAYS

AMOUNT			FOOD	FOOD VALUE				VITAMINS		
gms.	oz.	tblsp.		ch.	prot.	fats	cal.	A	B	C
8:00 A. M.—Breakfast.										
90	3	6	Strained orange juice or strained grapefruit juice (5 oz.).....	10.4	.7	.2	.....	0	xxx	xxxx
60	2	4	30% cream	1.3	1.5	18.0	.....	xxx	x	?
			1 soft boiled egg.....	0	6.0	6.0	.....	xxxx	x	0
30	(1 slice)		Whole wheat bread, toasted	13.3	2.9	.3	.....	xx	xxx	0
10	(1 pat)		Butter.....	0	.1	8.5	.....	xxxx	0	0
120	4	8	Whole milk	5.8	4.0	4.8	.....	xxx	xxx	xx
11:00 A. M.										
120	4	8	Whole milk	5.8	4.0	4.8	.....	xxx	xxx	xx
1:00 P. M.—Dinner.										
90	3	6	Strained tomato juice or							
120	4	8	Strained vegetable soup	4.0	0	0	.....	xxx	xxx	xxx
100	4	(4 large)	Scraped beef or minced breast of chicken	0	20.0	6.0	.....	x	x	x
60	2		Tender green vegeta- bles as turnip greens, spinach or string beans, etc. (mash)	4.0	2.0	.2	.....	xxx	xxx	xxx
30	(1 slice)		Toast, whole wheat bread	13.3	2.9	.3	.....	xx	xxx	0
20	(2 pats)		Butter.....	0	.2	17.0	.....	xxxx	0	0
120	4	4	(rounded) Ice cream, cup custard, boiled custard or gelatin.....	23.6	4.6	16.4	(Ice Cream).....	xxx	xxx	xx
60	2	4	Cream, 30 per cent....	1.3	1.5	18.0	.....	xxx	x	?
6:00 P. M.										
120	4	8	Whole milk	5.8	4.0	4.8	.....	xxx	xxx	xx
7:00 P. M.—Supper.										
120	4	8	Thick puree of peas or beans	8.0	4.0	.0	.....	x	xx	xxx
60	2		Tender green vegeta- bles as turnip greens, spinach or string beans	4.0	2.0	.2	.....	xxx	xxx	xxx
60	2	4	Cream, 30%	1.3	1.5	18.0	.....	xxx	xx	?
30	(1 slice)		Toasted whole wheat bread	13.3	2.9	.3	.....	xx	xxx	0
20	(2 pats)		Butter.....	.0	.2	17.0	.....	xxxx	0	0
120	4		Whole milk	5.8	4.0	4.8	.....	xxx	xxx	xx
90	3		Strained orange juice	10.4	.7	.2	.....	0	xxx	xxxx
Total				131.4	69.7	145.8	2116			

TABLE VI
FOURTH, FIFTH AND SIXTH WEEKS

AMOUNT			FOOD VALUE*					VITAMINS		
gms.	oz.	tbsp.	FOOD	ch.	prot.	fats	cal.	A	B	C
8:00 A. M. Breakfast.										
90	3	6	Strained orange juice	10.5	.7	.2	.....	0	xxx	xxxx
90	3	6	Strained oatmeal or ½ shredded wheat biscuit	10.0	1.8	.1	.....	0	0	0
90	3	6	Cream, 30%	1.9	2.3	27.0	.....	xxx	x	?
			1 egg soft boiled, poached or scrambled		6.0	6.0	.....	xxxx	xx	0
30	(1 slice)		Dry toast, whole wheat bread	13.3	2.9	.2	.....	xx	xxx	0
10	(1 pat)		Butter	0	.1	8.5	.....	xxxx	0	0
10:00 A. M.										
60	2	4	Cream, 30%	1.3	1.5	18.0	.....	xxx	x	0
120	4	8	Whole milk	5.8	4.0	4.8	.....	xxx	xxx	xx
1:00 P. M.—Dinner.										
120	4	8	Strained tomato juice, clear broth or tomato broth, or strained vegetable soup	5.3	0	0	.....	xxx	xxx	xxx
100	4	(4 large)	Scraped beef or minced chicken or lamb	0	20.0	6.0	.....	x	x	x
90		3	Turnip greens, spinach or string beans, mashed through a sieve	6.3	2.2	.3	.....	xxx	xxx	xxx
30	(1 slice)		dry toast, whole wheat bread	13.3	2.9	.3	.....	xx	xxx	0
20	(2 pats)		Butter	0	.2	17.0	.....	xxxx	0	0
120	4	4	(rounded) Ice cream, boiled custard, gelatin, watermelon or cantaloupe juice	23.6	4.6	16.4	(Ice Cream)	xxx	xxx	xx
4:00 P. M.										
			Same as 10:00 A. M.	7.8	5.2	22.8	.....	xxx	xx	x
7:00 P. M.—Supper.										
120	4		Thick puree of peas or beans	8.0	4.0	0	.....	x	xx	xxx
90	3	6	Strained oatmeal or ½ shredded wheat biscuit	10.0	1.8	.1	.....	0	0	0
90		3	Turnip greens, spinach or string beans mashed thru a sieve	6.3	2.2	.3	.....	xxx	xxx	xxx
60	2	4	Cream, 30%	1.3	1.5	18.0	.....	xxx	x	?
60	(2 slices)		Toast, whole wheat bread	26.6	5.8	.6	.....	xx	xxx	0
10	(1 pat)		Butter	0	.1	8.5	.....	xxxx	0	0
120	4	8	Whole milk	5.8	4.0	4.8	.....	xxx	xxx	xx
120	4	8	Strained orange juice	14.0	.9	.3	.....	0	xxx	xxxx
Total.....				171.0	74.7	160.2	2424			

*Estimated optimal diet: ch. 180—Prot. 70—Fat 160—Calories 2450.

THE JOURNAL

OF THE

ARKANSAS MEDICAL SOCIETY

Owned by the Arkansas Medical Society and Published under the direction of the Council.

WILLIAM R. BATHURST, Editor
810-812 Boyle Building, Little Rock, Arkansas.

Published Monthly. Subscription \$3.00 per year; single copies 25 cents.

Entered as scnd-class matter, June 21, 1906, at the postoffice at Little Rock, Arkansas, under the Act of Congress of March 3, 1879.

Acceptance for mailing at special rate of postage provided for in Section 1103, Act of October 3, 1917, authorized August 1, 1918.

The advertising policy of this Journal is governed by the rules of the Council on Pharmacy and Chemistry of the American Medical Association.

All communications of this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the State. Notice of deaths, removals from the state, changes of location, etc., are requested.

OFFICERS OF THE ARKANSAS MEDICAL SOCIETY	
HENRY THIBAUTL, President.....	Scott
R. H. T. MANN, President-Elect.....	Texarkana
HOMER SCOTT, First Vice-President.....	Little Rock
J. B. WHARTON, Second Vice-President.....	El Dorado
O. J. T. JOHNSTON, Third Vice-President.....	Batesville
R. J. CALCOTE, Treasurer.....	Little Rock
Wm. R. BATHURST, Secretary.....	Little Rock

COUNCILORS	
First District—W. W. VERSER.....	Harrisburg
Second District—J. L. JONES.....	Searcy
Third District—M. C. JOHN.....	Stuttgart
Fourth District—W. T. LOWE.....	Pine Bluff
Fifth District—L. L. PURIFOY.....	El Dorado
Sixth District—B. C. MIDDLETON.....	Texarkana
Seventh District—DEWELL GANN, SR.....	Benton
Eighth District—A. WATKINS.....	Little Rock
Ninth District—SAM G. DANIEL.....	Marshall
Tenth District—THOMAS DOUGLASS.....	Ozark

The medical society is an important factor in the progress and development of medicine. While some members of the profession do not appreciate the advantages to be derived from regular attendance and active co-operation in medical organizations, it is a fact that the busy and successful practitioners are usually present at all the meetings of their county, State, and national associations. This can only be explained by the fact that those of the profession whose experience and judgment have proved to be the soundest believe that medical meetings are profitable—Stuart Mc-
Gnire, California and Western Medicine.

Editorials

THE MAY MEETING

Dr. Henry Thibault of Scott is President of the Arkansas Medical Society and Dr. R. H. T. Mann of Texarkana was chosen President-elect at the annual meeting held in Little Rock in May. Other officers elected were as follows: First Vice-President, Dr. Homer Scott, Little Rock; Second Vice-President, Dr. J. B. Wharton, El Dorado; Third Vice-President, Dr. O. J. T. Johnston, Batesville; Treasurer, Dr. R. J. Calcote, Little Rock (re-elected); Secretary, Dr. William R. Bathurst, Little Rock (re-elected). Councilors: First District, Dr. W. W. Verser, Harrisburg; Third District, Dr. M. C. John, Stuttgart (re-elected); Fifth District, Dr. L. L. Purifoy, El Dorado; Seventh District, Dr. Dewell Gann, Sr., Benton (re-elected); Ninth District, Dr. Sam G. Daniel, Marshall. El Dorado was selected for the annual meeting in 1928.

Conditions immediately succeeding the recent floods, with many roads still impassable, many people being busily engaged in the work of rehabilitation and with much sickness and preventive work occupying physicians throughout the flooded districts, a record breaking attendance at the annual meeting was not to be expected, but at that there were more than 400 registered and that was in excess of anticipations, conditions considered. But it may be said that never was a more profitable and pleasant meeting held. There was a splendid program and it went through just as planned by the committee with two exceptions, one absentee being kept away through flood conditions and the other by illness. Our invited guests, Drs. Seale Harris of Birmingham, Ala., William Engelbach of St. Louis, Barney Brooks of Nashville, Tenn. and C. M. Rosser of Dallas, Texas, contributed most excellent and instructive papers and added much to the general merit of the program.

A very distinctive feature was the fine program made up by the Committee on Necrology, Drs. C. S. Pettus and E. E. Barlow presiding. The music was unusually fine, equal to professional talent, and was given under the leadership of Little Rock's gifted and sweet-voiced soprano, Mrs. Fred Isgrig. The unveiling of the monument in the City Park, Little Rock, commemorating the early history of medicine and marking the spot where the

first dissection of the human body in Arkansas was performed, was another of the historic features of the program. Illustrations showing this marker will be found in the next number of the Journal, together with the eloquent address delivered by Drs. Frank Vinsonhaler and Jas. H. Lenow.

Unqualified praise must be accorded the Little Rock physicians whose activities prior and during the meeting in caring for the innumerable details were important factors in its success. This is especially true to the physicians who held clinics at the various hospitals for the benefit of the visiting members. The secretary personally wishes to express his keen appreciation of the work of Dr. Homer Scott, local chairman of the Committee on Arrangements and to Dr. R. J. Calcote of the Committee on Program for their willing and valuable service in assisting the secretary throughout the sessions.

A special program was given by the Woman's Auxiliary and a report of their activities probably will reach us in time for publication in next month's issue of the Journal.

And now as to the future—under such leadership as is promised by President Thibault and the president-elect, Dr. Mann, there is every reason to believe that the Society and the profession generally will be further advanced and uplifted, that the interest of the membership will not only be retained, but increased and that we may face the future with confidence and faith in our purpose. It only remains for the entire membership to stand back of the officers, loyally and firmly.

Medical societies usually hold their regular sessions in different cities, and their meetings educate and stimulate the local profession, and advertise to the laity the fact that medicine is not bound by diets and dogmas; but is a progressive science ready to discard the old, if it is proved to be fallacious, and to adopt the new if it is found to be of value. The meeting of a medical society enables its members to read papers, thus giving them a legitimate opportunity to show their capacity; and to present new and original views as to the treatment of disease, thus adding to the knowledge of the profession. It enables members to hear papers read by others, thus giving them an opportunity to gain an amount of information they could get in no other way with so little labor and in so short a length of time. The

discussions that follow these papers are especially profitable. In them is an impressive personal element that is totally lost in the stenographic report published in the transactions.—Stuart McGuire, California and Western Medicine.

OUR DECREASING NUMBERS

Dr. William Allen Pusey, of Chicago former President of the American Medical Association, has a signed article in the current issue of *The American Mercury*, pointing out the decrease in the number of medical schools and graduates, especially as it affects the rural physicians. He shows that the number of medical schools has declined sixty per cent in the last twenty years and the annual number of graduates over thirty per cent.

The reasons given are several. For example twenty years ago High School graduation sufficed for eligibility to enter medical schools and the term in many places only three years. Now, in addition to High School graduation, there must be two years in college and four years in medical school, plus a year's service as an interne in some hospital before license to practice is granted. Dr. Pusey figures that if the recent decline continues in the same ratio there will be fewer physicians twenty years hence with a far greater population to serve. The greater cost of entering the profession and the longer time required are probably the chief factors in the decline for in this commercial age many young men seek a profitable career from the start and they are lured by the prospective financial reward in trades and other professions.

However, there is no cause for alarm. Preventive medical science, better sanitary methods have made matters easier, and the automobile, in eliminating distance, makes possible more prompt attention by fewer doctors and certainly helps to solve the rural problem. During the war, very few graduates were turned out and that in itself accounts for much of the loss, but there has been an increase of late years. As to the sixty per cent loss of medical schools, that is in part a blessing for many of the so-called proprietary schools which vended certificates have, happily been put out of business. The standard schools remain and the general tone of the profession has been raised.

The fact that statistics show an increase in average longevity of nineteen years is abundant evidence that while there may be fewer doctors in proportion to population, the qual-

ity has been more than proportionately raised, hence the improvement in the mortality statistics.

Editorial Clippings

ARE PREGNANCY AND PARTURITION NORMAL FUNCTIONS?

For some fifteen years Dr. Joseph B. De Lee has been urging the point of view that the function of child-bearing, while it may have been intended by nature at the beginning as a harmless process, has become, in the modern civilized woman, an event in which many factors may be pathologic. The topic formed the subject also of a statement presented last year before the congress held in Dublin as a part of the Coombe centenary celebration. If the ovum is considered an endoparasite with which the host must live in symposium for nine months, and if it is realized that the impregnated ovum brings into the body of the host blood qualities not previously there, the student of biology will understand that reactions long since recognized as partaking of pathogenicity take place in the pregnant woman. Studies of the metabolism of the pregnant woman, of her lessened resistance to some infections; for example epidemic influenza, of her increased susceptibility to some other conditions, as hyperthyroidism or goiter, indicate that her body is certainly not the same as in the non-parturient state except for the presence of the fetus. In spite of the best possible care, a large number of women still die or become permanently disabled as the result of child-birth. The estimates of obstetricians as to the incidence of severe pathologic processes in childbirth vary from 10 per cent to the statement accredited to Douglas that "the parous woman, *ipso facto*, is apt to die." If progress is to be made in the attack on the death rate of woman associated with childbirth there must be a revision of "the notorious disappreciation and disesteem of obstetrics" that exists at present.—*Jour. A. M. A.*, May 21, 1927.

VARIETY OF GOVERNMENTAL "BENEFITS"

This business of "governmental supervision and education" has become so infectious that even the U. S. Department of Interior has waded in with a sizeable bulletin which pre-

sents brief excerpts from literature and reports alleged to demonstrate the need and value of early diagnosis and treatment of disease and physical defects.

The motive behind this sort of propaganda may be seen in one of the leading paragraphs of the *Bulletin* which quotes the London *Lancet* as follows:

"Legislation has delivered the future parents of the race into the hands of the State at an impressionable age and though satisfactory education of their intellects may be impossible in our elementary schools for many years to come, the education of their bodies is practical politics—an ideal infinitely easier to realize."

Then here is another typical citation: "Statewide examination of children by *teachers* is carried out very successfully in Virginia and many districts have reported 100 per cent correction of defects of vision, hearing, nose and throat, teeth and weight."

Interspersed throughout the *Bulletin* are brief recommendations of health books and health magazines. *Hygeia*, the foremost, authoritative lay health magazine published by the American Medical Association, and the leading health publication in the United States, does not seem to be among the "favored" ones with the Federal Department.

It may be that "*Hygeia*" has been "overlooked" by the government health experts in their generous advertisement of health publications and books that should be read by the teachers of the United States because *Hygeia* happens to be published by the medical profession and which does not believe that the real way to apply wholesale preventive medicine to America is through government departments.

The editor of *The Nation's Business*, official publication of the U. S. Chamber of Commerce, has been poking fun at Federal departments for some months because of many of the asinine activities undertaken by them.

"Just the other day," he says in a current issue, "our attention was called to a publication issued from the Department of Commerce dealing with frogs. We started to read and learn, if possible, why the government of the United States should undertake to educate its public as to frogs."

"We read the introduction with its literary reference to Owen Wister's "Virginian and Fawg business;" we assimilated the figures in frog production; we learned how to catch

frogs both by hand and by machine methods; we classified frogs into commercial, possibly marketable, and undesirable.

"All was well. Then we came to the chapter on mating frogs, and we hesitated. All we knew of the love affairs of frogs was written by Mother Goose.

But we read on. We learned that the gentleman frog sings or rather croaks when in love. We learned, too, that he does not hesitate to die in battle in an effort to win his lady.

"We started to quote from the pamphlet, but hesitated when we recalled the fate that befell the producers to certain plays produced on Broadway.

And having hesitated, we were lost. We felt that *Nation's Business* was no place for sex.

"Then we calmed our nerves by re-reading 'The Principles of Window Curtaining' issued by the Department of Agriculture."—*The Ohio State Medical Journal*, June, 1927.

Abstracts

MEDICINE: ITS ACCOMPLISHMENTS AND ITS NEEDS

Jabez N. Jackson, Kansas City, Mo. (Journal A. M. A., May 21, 1927), in the President's address delivered before the American Medical Association at the Seventy-Eighth Annual Session, Washington, D. C., May 17, 1927, says: It is a great privilege to have lived in the present generation. Within its span more has been added to the sum of human knowledge than in any previous period of the world's history. The Golden Age it has been called—the Age of Science. Discovery after discovery has followed in such rapid sequence that the mind of ordinary man is awed with amazement. Fundamental principles of science slowly comprehended through long periods of time past, have suddenly found practical application beyond even the vision of the dreamer. In the fields of medicine the workings of science have been none the less remarkable, though less obvious to the general eye. When the microscope first enabled us to comprehend the fundamental cellular structure of the body, the key to the ultimate interpretation of life was put in our hands. When Pasteur discovered the existence of other cellular organisms capable of attack on human cells, he gave to our science its first knowledge of the essential cause and nature

of much of disease, and the new science of bacteriology was born. Through it pathology found a new interpretation and became a vital study. The culture tube and the reagent brought chemistry into the field, and through the three the laboratory became the center of medical investigation. Brief though the span since the birth of these sciences, their contributions to human welfare have been numerous and of value inestimable. The knowledge of how to prevent many diseases has alone saved to the world countless lives and immeasurable expense. Cholera, which once with its death scythe stalked through nations, has become now but a name. Yellow fever, which almost annually gleaned its thousands of human lives and paralyzed commercial activity, has been driven to the far recesses of Africa, where the few cases reported in the past year evidence its dying gasps. The sanitary control of malaria and other infectious fevers made effective by Gorgas built the Panama Canal and rerouted the commerce of the world. The curative contributions of medical and surgical science have been no less notable, though obviously less noted. The paths of progress have been fairly well blazed, but progress may be ever onward. The laboratory, the hospital and the opportunity for co-operation become henceforth the prime problems of medical practice. County or local hospitals are becoming more numerous year by year. Modern hospitals with laboratories and trained assistance cost money. Forty years ago an endowment of \$5,000.00 was adequate to provide for the support of one bed of hospital service constantly occupied for a year—\$300.00 a year. Today the cost of care of a patient in a city hospital ranges from \$4.00 to \$8.00 a day. This does not include the expense of special nursing or other services of like nature. It does not consider the doctor's service at all. The hospital is the outgrowth largely of a new and scientific medicine. Its necessity and its importance to the community must likewise become generally recognized. If proper character of medical service is required in any community, adequate facilities must be offered to attract proper medical talent to a place where it can render the service to which it has been educated. In this way and in this way alone can rural counties solve the problem of their adequate medical service. For the protection of the middleman, endowment is a necessity—endowment that will at least provide for the expense of purely scientific

service, a service which in itself has no direct return; endowment that will equip adequate modern laboratories such as proper service demands; endowment that will provide at least modest compensation for the purely scientific laboratory expert who has no other source of remuneration and yet whose aid is a necessity to all who practice; endowment that will meet the expense which the "Generation of Science" has brought to medical service.

HISTORY TAKING IN BRONCHIAL ASTHMA

Bronchial asthma may be due to many different causes and an extensive history is of fundamental importance in the specific diagnosis of this disease, according to Grafton Tyler Brown, Washington, D. C. (Journal A. M. A., May 28, 1927). He discusses the age of the patient, both the actual age and the age of onset of the asthma; the occupation of the patient and that of other members of the household with whom the patient comes in contact; family history; past history; the season in which the patient is most greatly affected; climate; foods (in inquiring as to the foods entering regularly into the patient's diet, it is important to remember that some of the staple articles, such as egg, milk and wheat flour, are encountered in innumerable ways); animal epidermals (in addition to actual contact with animals, careful inquiry should be made as to which of the animal epidermals, such as feathers, hair or wool, are present in the patient's environment); bacteria; pollens, and miscellaneous inhalants, such as orris root, dust and pyrethrum. The value of a history in bronchial asthma is dependent on: the care and patience with which it is taken; the physician's knowledge and appreciation of the significance of the various factors involved, which is acquired largely by experience; and the intelligence and co-operation of the patient.

Personal and News Items

Fifty-eight degrees and certificates were awarded to graduates of the University of Arkansas School of Medicine and the University School of Nursing at the commencement exercises at the High School auditorium, Little Rock, June 2.

Bishop H. A. Boaz was the principal speaker. He charged the graduates that as

guardians of the physical welfare of man, they should refrain as much from commercialism and materialism as if they were guardians of their spiritual welfare.

In the absence of Dr. John C. Futrall, president of the University of Arkansas, Dr. Morgan Smith, retiring dean of the medical school, awarded the diplomas to the graduates. The Rev. W. P. Witsell, pastor of Christ Church, offered the invocation.

In the absence of Governor Martineau, who was in Chicago attending the Flood Congress, J. P. Womack, superintendent of Public Instruction, made a short address telling of needs of the school and the necessity for new equipment. Dean Smith in presenting the diplomas to the graduates gave a short talk on professional ethics.

The meeting was dismissed by the Rev. Mr. Witsell.

WANTED—Salaried appointments for Class A physicians in all branches of the medical profession. Let us put you in touch with the best man for your opening. Our nation-wide connections enable us to give superior service. Aznoe's National Physicians' Exchange, 30 North Michigan, Chicago. Established 1896. Member the Chicago Association of Commerce.—(Adv).

Dr. Cooley S. Ellis of Hazen has associated himself with Dr. M. D. Kelly of Lonoke. Dr. Ellis will move to Lonoke about July 1st.

Brig. Gen. Frank T. Hines, Director of the Veterans' Bureau has just been advised that everyone of the 52 hospitals maintained and operated by the Bureau has been fully approved by the American College of Surgeons which is the criterion in matters of this kind in the United States.

The Veterans' Bureau hospitalization program is the largest in the world, and attainment of this high standard throughout the service is one of the outstanding features of the present administration of the Veterans' Bureau.

In announcing to the Director the full approval of these institutions Dr. M. T. MacEachern, Director of Hospital Activities of the American College of Surgeons took occasion to acknowledge "the whole hearted support of the Director and his staff and the personnel in the various hospitals considered" as contributory factors in attaining the 100 per cent mark.

Dr. MaeEachern said, "in no other part of the entire hospital field has the American College of Surgeons received better co-operation than in its dealings with the Veterans' Bureau in this respect, and we are very proud indeed to have your hospitals on our approved list."

Dr. Chas. R. Walton of the U. S. V. B. Hospital, Augusta, Ga., was in Little Rock recently. He was on a visit to his Arkansas friends and on his way to Benton, his former home. He has now returned to his post of duty.

Dr. W. B. Grayson of McGehee, Secretary of the Desha County Medical Society, visited in Little Rock this month.

Dr. C. C. Kirk of Little Rock attended the recent meeting of the American Psychiatric Society in Cincinnati, Ohio.

Dr. David W. Goldstein and family of Fort Smith visited in Little Rock this month.

BORN—May 15, 1927, to Mr. and Mrs. J. T. Beasley, 8532 Sloss Ave., Birmingham, Ala., a daughter, June Manfred. Mrs. Beasley will be remembered by our readers as Miss Purifoy, who attended many of our annual meetings in the interest of the Southern Medical Association. The Journal sends congratulations and best wishes.

Removals: Dr. R. N. Smith of Pine Bluff to Augusta; Dr. J. H. Stidham of Hope to Shawnee, Okla.; Dr. Thos. J. McGinnis of Sedgwick to Fisher. Dr. Thos. Jos. Richardson, Smackover to Seminole, Okla.; Dr. A. B. McKinney, Junction City to Tivoli, Texas.

Dr. R. M. Eubanks and Dr. Osear Gray of Little Rock have returned from Rochester, Minn., where they attended the Mayo Clinic.

Drs. Eubanks and Gray are now located in the New Donaghey Building and are limiting their practice to surgery.

The following Arkansas physicians attended the recent meeting of the American Medical Association in Washington, D. C.:

William R. Bathurst, Little Rock; Archibald Chace, Texarkana; Wm. G. Hodges, Malvern; W. A. Kriesel, Little Rock; Paul Mahoney, Little Rock; Harry E. Murry, Texarkana; E. B. Swindler, Stuttgart; Howard Collings, W. V. Laws, R. V. Patterson and Loyd

Thompson, Hot Springs National Park; H. D. Wood, Fayetteville.

Following the meeting Dr. H. D. Wood visited in Philadelphia, New York and Toronto.

The delegates report to the American Medical Association will appear in an early issue of the Journal.

At a meeting of the Lincoln County Medical Society, held May 10th, at Gould, the following officers were elected for 1927:

President, J. M. McClendon; Vice-President, A. C. Thiolliere; Secretary, Chas. W. Dixon.

The Woman's Auxiliary to the Saline County Medical Society held its May meeting with Mrs. Dewell Gann, Sr., of Benton. A resume of the year's work was given, followed by a report of the Auxiliary delegates to the Arkansas State Medical Society.

Following the business session, Mrs. T. E. Buffington read an interesting paper on "Heroes of Medicine." A reading and a song number were given by Mrs. John Shepherd Phillips, after which Miss Clennie Tomlinson gave several piano selections. The hostess, assisted by Mrs. M. A. Hardin, served a delicious plate luncheon. Mrs. Charles Walton of Augusta, Ga., was a guest of the club.

ANNUAL SESSION OF THE AMERICAN MEDICAL ASSOCIATION

Washington, D. C., May 16-20, 1927

REGISTRATION AND ATTENDANCE

At the annual session of the American Medical Association in Washington, May 16 to 20, there was a registered attendance of 6,273, meaning at least 10,000 visitors to the convention city. H. D. Wood, Fayetteville and Wm. R. Bathurst, Little Rock, represented the Arkansas Medical Society in the House of Delegates.

OUTSTANDING FEATURES

Among the outstanding features was an address by the President of the United States, Calvin Coolidge, who conferred high praise on the medical profession for its contribution to the social organization. The President and Mrs. Coolidge also held a special reception for physicians, on the White House lawn.

The departments of the national government, including the Army and Navy medical

departments, the U. S. Public Health Service and many medical bureaus, especially those of the Department of the Interior, assembled exhibitions for the visiting guests.

The publicity relative to the session in the newspapers of the country was the greatest ever given to an annual meeting of the Association. This is presumably a reflection both of the increasing interest of the public in the progress of medicine and of the co-operation between the American Medical Association and the American press. Practically all of the great press services and newspapers have special representatives in Washington. Arrangements had been made by the headquarters of the American Medical Association for aiding the dissemination of publicity through these channels, both previous to and during the session.

HOUSE OF DELEGATES

The following statement concerning the proceedings of the House of Delegates is not in any sense complete. A fuller outline has already appeared in *The Journal of the American Medical Association*, and the complete record will be printed in the official "Proceedings."

At the first meeting of the House of Delegates, May 16, the Speaker, Dr. F. C. Warnshuis, urged continued attention to the problems of nursing education and nursing service in the United States. He suggested an attempt to solve the question of the requirements, qualifications and standards for a capable, competent surgeon and a means to aid the public in making such an identification. He also urged State licensure and special hospital legislation as a means for protecting the public against poor and incompetent institutions.

The President of the Association, Dr. Wendell C. Phillips, urged continuous attention to the education of the public in matters of health. He suggested a proper system of censorship to safeguard medical publicity. He again recommended consideration of the restrictions placed on physicians in the prescribing of alcoholic liquors.

The President-Elect, Dr. Jabez N. Jackson, urged new attention to the problems of medical ethics, and the preparation of a manual which would make clear both to the profession and to the public the intent of the "Principles of Medical Ethics."

The President of the Association appointed a committee, consisting of Drs. Ray Lyman Wilbur, Rock Sleyster, G. E. Follansbee, Harlow Brooks and William Alley Pusey to act on public responsibility, having to do with the relationship of the medical profession to the public.

On recommendation of the Judicial Council, the opinion was adopted that all articles of an educational nature on medical or health subjects intended for the lay press or lay audiences should give expression to the consensus of opinion of the medical profession rather than to personal views, and that such articles should appear preferably under the auspices of the American Medical Association or of one of its component county societies or constituent State associations.

REPORT ON MEDICAL EDUCATION

In considering the report of the Council on Medical Education and Hospitals, the House of Delegates adopted the report of its reference committee. This committee considered as overoptimistic the views of the Council that the present medical schools are adequate to supply places for those wishing to enter a medical school. The reference committee believed that the Council on Medical Education might devote more attention to the problems of the supply of physicians and the question of medical care in rural districts, to the preparation of a statement on the defects in the present situation and to similar subjects.

The reference committee considered it necessary that the present curriculum be reduced materially and that any consideration of a new curriculum should give special attention to the training of general practitioners, with brief courses in the more important specialties. The recent decision of the Council to recognize as suitable for internship only hospitals in which there is a minimum percentage of necropsies was approved and recommended.

INVESTIGATION OF HEROIN

The reference committee on legislation and public relation requested the Board of Trustees of the American Medical Association to have another investigation of the use of heroin made by the Council on Pharmacy and Chemistry in conjunction with some of the scientific sections.

EVALUATION OF REMEDIES

It was recommended that the Association condemn as unwise and futile any attempt to evaluate a therapeutic agent by legislative

fiat, referendum, popular vote or any similar method. The conclusion was adopted that such evaluation can be made only by the investigation and decision of experts.

DISASTER RELIEF

A consideration of the report of the committee on disaster relief resulted in the adoption of a recommendation that the American Medical Association urge constituent associations and component societies that have not already established disaster relief committees to do so as soon as possible.

MORTALITY STATISTICS

It was urged by the adoption of a report of the reference committee on hygiene and public health that the attention of the United States Census Bureau be called to the impossibility of comparison of statements on maternal mortality of the various nations and that the bureau be urged to secure a strictly uniform definition of maternal mortality by the bureaus of vital statistics of various nations.

HEALTH CONFERENCES

The importance of health conferences was recognized and attempts to reduce the duplication of efforts in various fields were encouraged.

CONTRACT PRACTICE

The report of the Judicial Council of the American Medical Association to the effect that there were both ethical and unethical contracts possible, and that each contract must be judged on its merits was approved by the committee and adopted by the House of Delegates.

CHARGES FOR SERVICES TO INSURANCE AND INDEMNITY COMPANIES

A resolution to the effect that physicians were not under any obligation to provide information to insurance or indemnity companies unless paid the usual fees charged for similar services to private patients was approved and adopted by the House of Delegates.

INCOME TAX DEDUCTIONS

A resolution requesting the promotion of an amendment to the revenue bill relating to income tax, which gives the individual a right to deduct from his income tax the expenses of medical treatment for himself and family was referred to the Board of Trustees, with

the suggestion that they in turn transmit it to constituent State societies for action.

NURSING EDUCATION

Reports of the various committees on nursing education were received by the House of Delegates, and it was recommended that the American Medical Association give support in the work of the committee on grading of nursing schools and share in its financial program. The Board of Trustees appropriated the sum of \$5,000.00 for one year toward this end.

THE PHYSICIANS' HOME

A special committee reported on the need of a physicians' home. The committee recommended that the Secretary of the Association be requested to secure full information in regard to what is now being done by the profession for aged and incapacitated physicians, in various States and cities, so that other States or component societies may take measures to afford relief for dependent, worthy physicians, their widows and their orphans who may be in need. It was recommended that the secretary make a report on this matter at the next annual meeting. The committee was convinced that the need for a national home is not sufficient to warrant the American Medical Association in establishing, managing and sustaining a home.

COLLABORATION WITH HEALTH OFFICERS

Collaboration between physicians and health officers was urged as the only method of meeting the public health situation for the good of the profession and the public.

TRACHOMA AMONG INDIANS

The American Medical Association was urged to continue its affiliations with all the activities of the United States Government of the work being done by the national committee for the prevention of blindness for the elimination of trachoma among Indians.

LEGISLATION FOR COORDINATING GOVERNMENT

HEALTH ACTIVITIES

The House of Delegates reaffirmed its approval in principle of the Parker bill, coordinating the health activities of the federal government under the direction of the United States Public Health Service. It also adopted the report of the reference committee recommending approval of the Randall bill appropriating \$10,000,000.00 to establish a na-

tional institute of health under the control of the Surgeon-General of the United States Public Health Service.

DISABLED EMERGENCY MEDICAL OFFICERS

The House of Delegates reaffirmed its favorable action of 1922, requesting the passage of the Bursum Bill, which relates to the retirement of disabled emergency army medical officers on a parity with all other classes of disabled officers of the World War now on the retired list.

MEDICINAL LIQUOR

The report of the reference committee of the House of Delegates to the effect that hereafter the House of Delegates shall not pass any resolution pertaining to the therapeutic value of anything and that no committee report empowering any such resolution shall hereafter be presented until it has been considered by the Council on Scientific Assembly and the Council on Pharmacy and Chemistry was adopted. Recommendation was made that the special committee on alcoholic liquors be continued and be directed to co-operate in preparing a bill to be presented to Congress correcting the unfortunate provision of the Volstead Act limiting the amount of alcohol used, and providing such regulations as will permit doctors to prescribe whatever amounts of alcohol liquors may be needed for their patients, and subject to such reasonable restriction as may be thought wise and best after a conference with the head of the Prohibition Department.

It was also urged that the American Medical Association declare its adherence to the principle that legislative bodies composed of laymen should not enact restrictive laws regulating the administration of any therapeutic agent by physicians legally qualified to practice medicine.

A supplementary report of the Judicial Council recommended that "Every resolution presented relating to the alcohol question shall be referred to the Board of Trustees for investigation." The recommendation was adopted by the House of Delegates.

CAUSTIC POISONS

The House of Delegates approved the resolution extending to members of Congress the thanks of the American Medical Association for passing the Caustic Poison Act in 1927.

FORM LETTERS ON PERIODICAL PHYSICAL EXAMINATION

A resolution asking the Board of Trustees to prepare approved forms of letters or literature which may be sent out by county medical societies to the public to promote the value of periodic health examinations and information that the examinations can be made and records kept by qualified physicians who are members of the American Medical Association, in this manner helping to circumvent the harmful advertising activities of commercial agencies dealing with periodic health examinations, was endorsed by the reference committee and adopted by the House of Delegates.

CONTRACEPTION

A resolution recommending the alteration of existing laws, wherever necessary, so that physicians may legally give contraceptive information to their patients in the regular course of practice was referred to the Board of Trustees of the Association.

HEALTH HAZARDS IN INDUSTRY

The resolution petitioning Congress to make possible an increase in the personnel and resources of the United States Public Health Service in order that the service may extend its activities in the field of industrial hygiene was referred to the Board of Trustees.

AMENDMENTS TO THE BY-LAWS

Notices of proposed amendments to the By-Laws: (1) Defining the powers of the Judicial Council; (2) Defining the legislative powers of the Association and the right of the House of Delegates to expel members or Fellows on recommendation of the Judicial Council; (3) A resolution changing the members of the Council on Medical Education and Hospitals was presented and must lie over to 1928 for action.

WOMAN'S AUXILIARY

A motion that the House of Delegates request the Board of Trustees to appoint a liaison committee between the American Medical Association and the Woman's Auxiliary was adopted.

ELECTION OF OFFICERS

In the election of officers, Dr. William S. Thayer of Baltimore was elected President of the Association; Dr. Charles A. Elliott of Chicago, Vice-President; Drs. Olin West, Secretary and Austin A. Hayden, Treasurer,

were re-elected, as were also the Speaker, Dr. Frederick C. Warnshuis of Grand Rapids, Mich., and Vice-Speaker, Dr. Allen H. Buncie of Atlanta, and the Trustees, Drs. Edward B. Heckel of Pittsburg and Roek Sleyster of Wauwatosa, Wis.

The President, Dr. Jabez N. Jackson, made the following nominations to appointments on the various councils: For the Judicial Council, Dr. Donald McCrae, Jr., Council Bluffs, Iowa, and Dr. Frank Cregor of Indianapolis, to succeed Dr. Thayer; for the Council on Medical Education and Hospitals, Dr. Emmett P. North, St. Louis; for the Council on Scientific Assembly, Dr. Frank H. Lahay of Boston. These nominations were confirmed.

THE SCIENTIFIC SECTIONS

More than three hundred manuscripts were read in the sixteen scientific sections of the Association, covering many medical subjects. A complete list of the papers read with the names of the persons discussing them appears in *The Journal of the American Medical Association* for June 11, 1927, beginning on page 1896.

County Societies

INDEPENDENCE COUNTY

(Reported by M. S. CRAIG, Sec.)

The regular meeting of the Independence County Medical Society was held in the Court House at Batesville, Monday night, June 13th. Preceding the meeting the Society was given a banquet at the Johnson Hotel by the physicians of Batesville.

Present: Gray of Evening Shade; Laman of Cave City; Huskey of Moorefield; Kennerly, Lawrence, Hinkle, Evans, Rodman, Johnston, Hooper, and Gray of Batesville; Dr. Hamilton of Jefferson City, Iowa was a visitor.

The following scientific program was rendered:

"Treatment of Hemorrhoids, Medical and Surgical"—Dr. J. M. Hooper.

"Typhoid Fever"—Dr. G. T. Laman.

"Anemias"—Dr. L. T. Evans.

"The Value of X-Ray Urgently Requested"—Dr. F. A. Gray.

The Society agreed to meet at Searey with the District Medical Society the second Monday night in July.

MISSISSIPPI COUNTY

(Reported by F. D. SMITH, Sec.)

The regular meeting of the Mississippi County Medical Society was held in the Community House at Wilson, Tuesday evening, May 10th.

Present: Crawford, Ellis, Barksdale, Harwell, Massey, Hudson, Saliba, Hill, Grimmer, Usrey and Smith.

Dr. Eugene Rosamond of Memphis, was a very welcome visitor and delivered an interesting talk on "Diagnosis of Tuberculosis in Children."

Dr. Crawford read a paper on "Coronary Occlusion."

The next meeting will be held June 10th, at Oseeola, in conjunction with the Civic Club of that city.

OUACHITA COUNTY

(Reported by R. B. ROBINS, Secretary)

The Ouachita County Medical Society held its regular monthly meeting at the Camden Hospital on the evening of May 5, 1927; President, Dr. J. S. Thompson, in the chair. A banquet was served by the nurses of the hospital and the following program was rendered:

1. Hospital Report—Miss Helen Blacknall.
2. Case Report—Dr. Sam Thompson.

The report of the Camden Hospital since its opening May 1, 1925, shows that 597 patients have been treated. Over half of these patients were out of town patients, thus demonstrating the support given the hospital by nearby sections of the county. Out of the total number of patients 414 have been surgical cases and 183 medical and obstetrical cases. The death rate has been a little more than 3 per cent of the patients, as the total number of deaths has been 22.

Present at the meeting were: Drs. Woolbridge, Worthington, Roberts, Rinehart, Purifoy, Newsom, Sam Thompson, J. S. Thompson, Jameson, Powell, Partee, Word, Early and Robins. Drs. McLeod and McWilliams of Magnolia were guests of the society.

The next meeting will be held in June with the Columbia County Medical Society as our guests.

Book Reviews

Fundamentals of Dermatology—By Alfred Schalek, M. D., Professor of Dermatology and Syphilology, University of Nebraska College of Medicine. Illustrated with 54 engravings. Published by Lea & Febiger, So. Washington Square, Philadelphia. 1926. Price \$3.00.

This book gives as its name implies the "Fundamentals of Dermatology." The author presents this subject in a concise and as thorough a manner as the limited scope permits. The illustrations have been selected which represent the skin diseases clearly.

Defective Memory, Absentmindedness and their Treatment—By Arnold Lorand, M. D., Carlsbad, Czecho-Slovakia. Author of "Old Age Deferred," "Health Through Rational Diet." Published by F. A. Davis Company, Philadelphia. 1926. Price, \$3.00 net.

In this book hygienic hints are given for the preservation and strengthening also of a normal memory. The contents cover the following chapters: (1) "The Foundation of a Good Memory." (2) "The Recognition of Pathological Forgetfulness." (3) "The Causes of Forgetfulness." (4) "The Treatment of Forgetfulness." (5) "Absentmindedness." (6) "Practical Hints for Assisting the Memory." (7) "The Treatment of Ailments Causing a Poor Memory." (8) "On the Influence of the Conscious and Subconscious Mind Upon Memory."

General Index Volume of the Collected Papers of the Mayo Clinic and the Mayo Foundation.—1884 to 1925, inclusive. Octavo volume of 227 pages. Published by W. B. Saunders Company, Philadelphia, 1926. Cloth, \$5.00 net.

Shell Shock and Its Aftermath.—By Norman Fenton, Ph. D., Associate Professor of Psychology, Ohio University; formerly at Base Hospital 117, A. E. F. With an Introduction by Thomas W. Salmon, M. D., Professor of Psychiatry, Columbia University. Illustrated. Published by The C. V. Mosby Company, St. Louis, 1926. Price, \$3.00.

The scientific value of this study on the problem of shell shock (war neurosis) is great. The author shows the seriousness of any severe psychoneurotic manifestation. In the introduction by Dr. Thomas W. Salmon, we quote, "in addition to providing most interesting and useful sidelights upon a major medico-military problem, constitutes a praise-worthy guide for those who have the opportunity of studying other groups of persons who have developed psychoneuroses and have been made the object of some more or less systematic efforts at treatment."

International Clinics—A Quarterly of Illustrated Clinical Lectures and Especially Prepared Original

Articles by Leading Members of the Medical Profession Throughout the World. Edited by Henry W. Cattell, A. M., M. D., Philadelphia. Volume III, Thirty-sixth Series, 1926. Published by J. B. Lippincott Company, Philadelphia.

In this issue of the International Clinics is a very interesting article by Dr. Wm. D. Flemming on "The Functions of the Liver and their Appraisal." It does not deal with a test of liver function as comprising in one test all these duties, but with the idea of liver functions. The author says, "The part played by the liver in protein metabolism, in carbohydrate metabolism, in the formation and excretion of bile and in the excretion of foreign dyestuffs will be mentioned and various tests for the ability of the liver to perform these several tasks discussed, special attention being given to those tests which have been found most helpful clinically."

Physicians of the Mayo Clinic and Mayo Foundation.—A series of 635 biographical sketches with 611 portraits and including complete and accurate data concerning the professional life of each physician prior to January 1, 1926. Octavo volume of 578 pages. Published by W. B. Saunders Company, Philadelphia, 1927. Cloth, \$7.00.

This book gives in a brief form a biographic sketch concerning the professional life of each physician who, prior to January, 1926, had been officially connected with the Mayo Clinic or The Mayo Foundation for a period of one year or more. In Arkansas, we find the names of O. C. Melson, J. I. Searborough, C. S. Williamson and John O. Gurney.

An Outline History of Ophthalmology.—By Thomas Hall Shastid, A. M., M. D., F. A. C. S., Tenth Avenue Medical Building, Duluth, Minnesota. Published by the American Optical Company, Southbridge, Massachusetts. 1927.

This book presents a forty-five minute address on the history of Ophthalmology, delivered before the Minnesota Academy of Ophthalmology and Oto-Laryngology at its meeting in Minneapolis, May 14, 1926.

Pneumoconiosis (Silicosis).—A Roentgenological Study with Notes on Pathology. By Henry K. Pancoast, M. D., Professor of Roentgenology, University of Pennsylvania; Roentgenologist to the University Hospital, Philadelphia, Pa., and Eugene P. Pendergrass, M. D., Associate in Roentgenology, University of Pennsylvania; Assistant Roentgenologist to the University Hospital, Philadelphia. Published by Paul B. Hoeber, Inc., New York. Price, \$4.00.

In this small volume the authors not only give the roentgenological aspect of pneumoconiosis, but include the present day views of the pathology of this diseased condition. The book contains twenty-three illustrations.

THE JOURNAL

OF THE Arkansas Medical Society

PUBLISHED MONTHLY UNDER THE DIRECTION OF THE COUNCIL

Vol. XXIV

LITTLE ROCK, ARK., JULY, 1927

No. 2

Original Articles

ANNUAL ADDRESS*

J. M. LEMONS, M. D., Pine Bluff

President, Arkansas Medical Society

This is indeed a great moment in my life, to have the privilege and honor to appear before you as President of the Arkansas Medical Society on its fifty-second anniversary. To be president of this society is the greatest honor you can confer on one of its members. Like many others, I am, by choice, an adopted son of the great State of Arkansas, and I am indeed proud to be a citizen of the greatest State in our Union. We have all our sister States have, and more besides. We have a diamond mine and we have aluminum mines. From our Arkansas mines, we furnish 95 per cent of the world's supply of aluminum.

Arkansas has and is producing great men. We have great ministers, great physicians, great teachers, great schools and colleges, a university and a great medical college. We will only make mention of one of our great business men who is a native Arkansan, and that is Harvey C. Couch. As the years come and go great and good men are passing on to their reward. We must continue to make good men in all lines of business and professions, and by all means, we must continue to make great physicians.

Our Student Loan Fund is a step in the right direction to make able physicians in our State, and great honor is due to the men who have charge of this fund to assist worthy young men in completing their medical education. Let us help the committee all we can in handling the Student Loan Fund, to place it

where it will do the greatest amount of good, and add to this fund from time to time as our finances permit. Just here, I wish to say that it has been suggested by some of our young graduates in medicine that our medical college should teach more about medical ethics. They say about all they hear while they are in college is how to avoid malpractice suits, but nothing is said about medical ethics. If the students had lectures on medical ethics, when they get out into general practice they would not have to be arraigned before the County Medical Society for infractions. I am proud to say, however, that medical ethics is now being taught in our State Medical College by very able physicians, our President-Elect, Dr. H. Thibault, and the new dean, Dr. F. Vinsonhaler.

It is indeed gratifying to know that Arkansas is now recognized and has been accepted by the Census Bureau of Vital Statistics. A State to be received, or admitted, must show 90 per cent of all births and deaths. There are a few of our good physicians who cannot fully appreciate the necessity of filling out the birth and death certificates, and the report of all contagious and infectious diseases. Let's go forward and not fall backward in our vital statistics reports, and assist our State Board of Health all we can in this work.

There is a great deal being said and written about the old time family physician passing out, or will soon be no more. As we all know the family physician is the first to see the humble and the high, in all walks of life, and it is he who makes the first examinations and finds the trouble with the patient, and if a specialist is needed, he is called. After the specialists have done their work, the patient then is returned to the family physician, and so he has to care for his patient again until health is restored. It has been said by some of the eminent men in our profession that they

*President's address read before the Fifty-Second Annual Session of the Arkansas Medical Society, Little Rock, May 11-13, 1927.

are afraid we are getting away from the old-time family physician's ideas and customs, that we saw in former years, in his fatherly attitude of interest and tenderness in examinations and operations.

The late ruling of the Nurses' Association is causing comment from a great many sources. The graduate nurse now only works twelve hours on a shift, let it be either day or night, and the Association refuses to let a nurse watch a convalescent patient through the day and night by having a cot placed in the sick room so that if the patient should need a little attention at night she could be aroused and this attention given. This ruling of the Nurses' Association has caused quite a bit to be said about training practical nurses, that they may come in and do duty as has been done in the past in the convalescent stage of the patient. Read what Dr. H. A. Hare has to say in the *Illinois Medical Journal*, March, 1927. It is worth your time.

May I repeat what has been said by someone. "Do the doctors of today have the respect of the public as the doctors of fifty years ago?" The doctor then was looked upon as a leader in the community in which he lived and practiced his profession, and everybody who spoke of him said "Doctor" and not "Doc." It has been said this is caused by some of our clubs calling all of its members by their first name, Bill, Tom, Bob, Harry, etc., as the case may be. The doctor is no longer "Doctor," just common old "Jim" or "John." A very eminent man has said, "too much familiarity with the public causes it to lose respect for the professional man, whatever his profession may be."

The day of miracles has not passed. Our Lord and Master is still performing miracles today through the physicians and surgeons. More people are being blessed today than ever before, so let us be humble servants of our Master. Pray more, love each other more, and when we pass to that Clime whence no traveler has e'er returned, we may wear a crown of jewels.

In the beginning, God saw that man needed a helpmate, so he made woman, and ever since the days of Adam and Eve, man has needed the help of woman. The American Medical Association, the State Societies and the county societies were organized, each doing good work; but nothing is so good that could not be made better, so someone saw that these or-

ganizations could be made better by the aid of women, hence, the organization of the Auxiliaries. We are proud that the good wives of the doctors of our State Society have organized, and with leaders such as Mrs. C. W. Garrison, Mrs. Dewell Gann, Sr., Mrs. C. T. Drennen and many others. We hail the advent of this body of the council as the most important epoch in the history of medicine in recent years, and we speak for them a wholesome welcome and a hearty co-operation.

"No man was ever meanly born,

About his cradle is the wonderful miracle
of life.

He may descend into the depths;

He may live in infamy and perish miserably
But he is born great.

Men build monuments above the graves of
their heroes

To mark the end of a great life,

But women seek out the birth place and
build their shrine

Not where a great life has its ending

But where it had its beginning."

Let me do my work each day; and if the darkened hours of despair overcome me, may I not forget the strength that comforted me in the desolation of other times. May I still remember the bright hours that found me walking over the silent hills of my childhood, or dreaming on the margin of the quiet river, when a light glowed within me and I promised my early God to have courage amid the tempests of the changing years. Spare me from bitterness and from the sharp passions of unguarded moments. May I not forget that poverty and riches are of the spirit. Though the world know me not, may my thoughts and actions be such as shall keep me friendly with myself. Lift mine eyes from the earth, and let me not forget the uses of the stars. Forbid that I should judge others, lest I condemn myself. Let me not follow the clamor of the world, but walk calmly in my path. Give me a few friends who will love me for what I am; and keep ever burning before my vagrant steps the kindly light of hope. And though age and infirmity overtake me, and I come not within sight of the castle of my dreams, teach me still to be thankful for life, and for time's olden memories that are good and sweet; and may the evening's twilight find me gentle still.—Max Ehrmann.

THE JOURNAL

OF THE

ARKANSAS MEDICAL SOCIETY

Owned by the Arkansas Medical Society and Published under the direction of the Council.

WILLIAM R. BATHURST, Editor
810-812 Boyle Building, Little Rock, Arkansas.

Published Monthly. Subscription \$3.00 per year; single copies 25 cents.

Entered as scnd-class matter, June 21, 1906, at the postoffice at Little Rock, Arkansas, under the Act of Congress of March 3, 1879.

Acceptance for mailing at special rate of postage provided for in Section 1103, Act of October 3, 1917, authorized August 1, 1918.

The advertising policy of this Journal is governed by the rules of the Council on Pharmacy and Chemistry of the American Medical Association.

All communications of this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the State. Notice of deaths, removals from the state, changes of location, etc., are requested.

OFFICERS OF THE ARKANSAS MEDICAL SOCIETY

HENRY THIBAUT, President.....	Scott
R. H. T. MANN, President-Elect.....	Texarkana
HOMER SCOTT, First Vice-President.....	Little Rock
J. B. WHARTON, Second Vice-President.....	El Dorado
O. J. T. JOHNSTON, Third Vice-President.....	Batesville
R. J. CALCOTE, Treasurer.....	Little Rock
Wm. R. BATHURST, Secretary.....	Little Rock

COUNCILORS

First District—W. W. VERSER.....	Harrisburg
Second District—J. L. JONES.....	Searcy
Third District—M. C. JOHN.....	Stuttgart
Fourth District—W. T. LOWE.....	Pine Bluff
Fifth District—L. L. PURIFOY.....	El Dorado
Sixth District—B. C. MIDDLETON.....	Texarkana
Seventh District—DEWELL GANN, SR.....	Benton
Eighth District—A. WATKINS.....	Little Rock
Ninth District—SAM G. DANIEL.....	Marshall
Tenth District—THOMAS DOUGLASS.....	Ozark

LINDBERGH, THE MAN

The preparation for Lindbergh's remarkable achievement began before he was born, according to Dr. Matthias Nicoll, Jr., New York, State Commissioner of Health who paid his respects to the Colonel in a recent health talk broadcast from Station W G Y.

Lindbergh's success is attributed by Dr. Nicoll to the fact that he was born of "good stock" and raised in a healthy and inspiring enviornment; that he has led a well regulated life; has good habits; and presumably—since it is required by the air service—has had periodic checking up of his physical condition.

(Continued on page 28)

Editorials

THE PRESIDENT'S MESSAGE

The annual address of Dr. J. M. Lemons, Pine Bluff, as President of the Arkansas Medical Society, delivered at the annual meeting in Little Rock, May 11-13 touches on points in medical welfare, worthy of consideration by the Society.

Referring to the Student Loan Fund, instituted for the purpose of helping worthy young men to obtain the necessary medical training, he stresses the need for co-operation with the committee, and the need of additional funds for this purpose. He voices a complaint that some young students have made that the subject of medical ethics has not been sufficiently taught; but, he adds, that this very necessary study now is included in the curriculum and good results are expected in our own school of medicine, under the direction of Drs. Vinsonhaler and Thibault.

Dr. Lemons also congratulates the State at large on the admission of Arkansas by the Census Bureau of Vital Statistics. To have as nearly as possible a full and complete record of births and deaths as well as reports of all contagious and infectious diseases, must conduce to the betterment of the health and well being of the whole State.

Dr. Lemons' address closes with a deserved tribute to the ladies who have been prominent in organizing and aiding in the work of the Woman's Auxiliary, whose advent he regards as marking the most important epoch in the State's history of medicine in recent years.

The address is published in full in this issue of the Journal and is well worth the attention of its readers.

ANOTHER BELOVED MEMBER GONE

With regret we are called upon to announce the loss of another well beloved and faithful member of the Arkansas Medical Society in the death at his home, Pine Bluff, of Dr. H. E. Williams, Sr., after an illness of about twelve months. Dr. Williams was the dean of the profession in Jefferson County and served as county coroner for twenty years, his work being so faithfully performed that he was re-elected term after term. That alone speaks volumes for his efficiency and popularity.

Dr. Williams was born at Macon, Miss., in 1854, studied medicine at Memphis and Louis-

ville and graduated from Tulane University in 1886. He began the practice of his profession at Poplar Bluff, Mo., but moved to Arkansas in 1888, locating at Fordyce. Later he moved to Lewisville, where he remained four years, moving to Pine Bluff in 1894, where he made his home until his death. Dr. Williams was twice married. His first wife, Miss Mollie Daniels, bore him two children, Dr. Harry E. Williams, Jr., and a daughter Julia, now Mrs. Earl Glascock. His first wife died in 1889 and a year later he married Miss Jessie B. Bunn of Fordyce, daughter of Judge Wiley Bunn. She bore him six children, Wiley W., H. Stanley, Anna, Laura, John and Joseph.

Dr. Williams was a Mason, a member of Sahara Shrine Temple, a member of the Baptist Church and of the Jefferson County Medical Society, members of which were honorary pall bearers. A further tribute was afforded by the Nurses Association, which formed an honorary escort at the funeral, which they attended in a body.

In addition to being county coroner, Dr. Williams was associated with his son, Harry E. Jr., in the practice of medicine.

PRINCIPLES OF GROUP MEDICINE

A few of the principles of group practice are constant and immutable, but the ways and means of their application must of necessity vary to meet conditions which are essentially local. Among the members of a group there should exist:

- (1) Loyalty.
- (2) Unity of purpose.
- (3) Liberal understanding.
- (4) Harmonious relations.
- (5) Co-operative spirit.
- (6) Self-abnegation and a willingness to work for the art which they profess.

An organization may be small, it may be imperfect in its management, it may be unpopular with outside doctors, but if it adheres to these principles, it will endure in the esteem of the public. The most successful clinic is not one which admits the largest number of patients, but one which renders the best service; it is not the clinic which discharges the largest proportion satisfied and well; it is not the clinic which has the most elaborate equipment, but the clinic which uses what it has to the best possible advantage; it is not the

clinic which makes the most money, but the one which does the greatest good with the money that it has at its disposal.

Dr. John Gibbon of Philadelphia, has said of surgical practice: "Wisdom is as necessary as knowledge and not so easily acquired." It is evident that there is an ever-growing demand for wisdom in the co-ordination of the doctor's daily work. Because it is a comparatively young institution, group practice depends for its success upon wisdom in every course of action—Philemon E. Truesdale, M. D., F. A. C. S.—The Boston Medical and Surgical Journal.

LINDBERGH, THE MAN

(Continued from page 27)

"Like a cooling breeze from the West at the end of a sultry day," said Dr. Nicoll, "young Lindbergh burst without warning upon a hurrying, pleasure seeking and careless world in which relative values seemed for the time to have gone topsy-turvy. The people of every civilized nation paused in their work and play, applauded and wondered. Idealism was again restored to the pedestal that seemed so firmly grounded during the great war, while scandal, sensationalism, national and international bickerings were no longer first page 'copy' or of any public interest.

"Charles Lindbergh's conquest of the air, wonderful as it was, will in the future assume relatively less importance and Lindbergh, the man, more. He could not have done what he did if he had not been what he is: a man with a sound mind in a healthy body, in whom is combined the spirit and daring of youth with the calm judgment and physical stamina of maturity.

"Neither luck nor foolhardiness was responsible for Lindbergh's remarkable success. When, on too occasions, he had to abandon a plane in the air, it was his ability to think clearly and quickly and the fact that he had a parachute in good working order that saved him, not luck. When he landed on Long Island on May 12, and later took to the air alone and under apparently uncertain weather conditions, we thought that a skillful but reckless boy was gambling with fate. Now we know that a man, thoughtful and mature, had given full consideration to every minute detail of his undertaking.

PROCEEDINGS
OF THE
FIFTY-SECOND ANNUAL SESSION
OF THE
Arkansas Medical Society

Little Rock, May 11, 12, 13, 1927

HOUSE OF DELEGATES

FIRST DAY

Wednesday, May 11, 1927

The House of Delegates was called to order by the President, Dr. J. M. Lemons, at 9:30 o'clock, a. m.

The President appointed the following Credentials Committee: Drs. M. L. Norwood, J. S. Kolb and Geo. B. Fletcher.

After a recess of a few minutes, this committee made the following report:

Your Credentials Committee wish to report that the credentials of the delegates are in good form and correct, and a quorum present.

On motion, the report was adopted.

The President appointed the following as the Reference Committee: Don Smith, S. F. Hoge and W. H. Mock.

The minutes of the Fifty-First Annual Meeting as published in the July, 1926 issue of the Journal of the Arkansas Medical Society were adopted.

The President here read his address to the House of Delegates.

To The House of Delegates of the 52nd Annual Meeting of the State Medical Association:

Gentlemen of the House of Delegates, you are the law-making and controlling body of our State Medical Society, and each of you holds a very responsible and trustworthy position. You represent each councilor district and every county society in the State; so what is done in our meetings, let it be done in order and decency.

I want to thank each chairman of the nine committees and each one serving on the different committees for their time and service;

the Scientific Program Committee for their wonderfully entertaining program. I want especially to congratulate the Legislative Committee on the way they have handled the business that has come before them. I would like very much to make mention of each chairman and his committee, but time will not permit, but I wish to say that their work is very much appreciated.

The county societies all over the State are waking up to the fact that their respective societies depend on hearty co-operation and it is a fact, if we get anything out of our county societies we must put something in each meeting. Who make up these county societies? You and I. Our county societies are improving in their programs, but let's make them better.

The question has been asked—is the Journal of the Arkansas Medical Society worth-while? Should it be discontinued, or should it be continued? Some physicians say, "well, I never look at the Journal." That may be true. Some say it is too small and others will say the American Medical Association Journal is too large. So it goes. A State Medical Society without its own Journal is like a ship without a rudder.

Referred to the Reference Committee for further action.

Reports of the various standing committees were next in order, as follows:

SCIENTIFIC PROGRAM

R. J. Calcote, Chairman

Dr. Calcote: Our report is in your hands already. This committee is composed of R. H. T. Mann of Texarkana, A. S. Buchanan of Prescott, and myself as chairman. We believe this is a good program; we are proud of it. I would like to call attention to a few outstanding features of the program. This afternoon we will have Dr. Wm. Engelbach of St. Louis; tomorrow morning at ten o'clock we shall have Dr. Barney Brooks of

Nashville. At one o'clock tomorrow afternoon, Dr. Seale Harris of Birmingham. Tonight at the public session to be held in this hall, we shall have an address by Dr. C. M. Rosser of Dallas, Texas. He is ex-president of the State Medical Association of Texas and Professor of Surgery of Baylor University, and has done as much for medicine as any other man in his State.

MEDICAL LEGISLATION

Earle H. Hunt, Chairman

For the past year, perhaps most of you thought we didn't do anything. We were supposed to try to get a composite board. We have a letter which was written and sent to every doctor in the State by the acting secretary, Thad Cothorn of Jonesboro. I want to say right here that the chairman of this committee confesses that he has done very little and all that has been done by this committee has been done by the acting secretary, Thad Cothorn.

We mailed out 1,150 form letters to the doctors of our State (see copy March Journal), and we received 102 replies. Many worth-while suggestions were made. Many expressed a preference for one thing only; some for two or three alternatives; and several had as many as four, five, six or more alternatives. Our final summing up of the wants made known to us by these letters does not bear a definite ratio to the number of letters received, due to the fact that many of the letters had more than one wish expressed.

Forty-four desired a basic educational bill as recommended by the Bureau of Legal Medicine and Legislation of the A. M. A. Forty-six desired the Medical Practice Act to remain as it now is, and to arrange some way for its better enforcement. Five desired a composite board with a ratio of 4-2-1 regulars, eclectics and homeopaths. Twenty-eight wished to leave it up entirely to the legislative committee. Two were for making a high school course sufficient educational requirement for entrance to a medical school. Three desired a State General Hospital as their main wish. Two desired a hospital for every county with a levy of one mill for its erection and maintenance. Three expressed a wish for the junior medical students to be given temporary permits to practice. Seven expressed a wish not to give a permit to practice to a junior medical student. One desired the primary examinations be given by non-medical men. Twenty suggested a policy of "watchful waiting" for some of the cults and fads to die out. Many—we did not count them all—desired a full enforcement of what ever law was now on the statutes or might be enacted, and over a thousand, by their silence, expressed no interest.

The legislative committee couldn't do anything this year and has never been able to do anything and that is the reason it will never be able to do anything until the membership as a whole gets interested. We have a good law if we could get it enforced. There will be some recommendations made by the chairman of the council which I think is just exactly what the State Medical Society needs. You can't get any committee of doctors working. We all have to stay at home some of the time to make a living. It will take twenty-four months of hard work of somebody doing that and nothing else, to be put on a full-time salary, to get this law enforced. If we can get our present law enforced, we can have a State board here that will be recognized by all the States and, until we get the law enforced, we are going to be cut off from a lot of other States who refuse to reciprocate with us because we are in bad standing.

Referred to the Reference Committee.

NECROLOGY

Cowley S. Pettus, Chairman

We, the Committee on Necrology, wish to report that we have worked together in accord, and congeniality of thought. We esteem our deceased members and think that the Memorial Services should be given every consideration and looked upon as a sacred gathering.

To honor the dead is an old-time custom which will live as long as conscientious, loyal, tender-hearted, Christian people live. Our profession is one for humanity and an opportunity to show our respect to our deceased fellow workers who have faithfully performed their duties should be an unusual event. We have worked to this end and arranged our program accordingly. We have procured friends of each deceased member to speak the eulogy of his deceased friend, hoping by this arrangement to impress our services, place each member on an equality, and give solemnity and proper respect for the dead. We feel that the most obscure doctor, in proportion to his surroundings and opportunity, has performed his labor equal to the most renowned, and his memory is entitled to the same consideration.

We regret that twenty-eight members of our State Society have died during the past year which is the largest mortuary list of any year that we recall.

The committee wishes to suggest that the laws governing the meeting of memorial services to be held the morning of the second day be investigated by the Committee on By-Laws, for them to consider whether a change should not be made which would add to the convenience of the Program Committee, as the present law fixing the day for the service necessitates the Program Committee to build their program around the Memorial Services.

Because of this law governing the Memorial Services, the Program Committee was unable to grant the request of our committee to have the Memorial Service at the church. Unless the services were conducted at the general meeting hall at the time given for its meeting, the program would be so disturbed that the Memorial Service and the general program would interfere with the other, depriving members of participation in the latter program. This brings us to conclude that if the Memorial Services were left to the discretion of the Program Committee it would expedite matters and the Program Committee would be in position to arrange the program to better advantage.

We wish to emphasize the importance of the Memorial Service and trust every member attending the State Medical Meeting will give his presence to this service, which is to be held May 12, from 8:00 to 10:00 A. M., in the regular meeting hall at the Capital Hotel. We think that the Memorial Service is an important part of the yearly program.

It offers an opportunity for the sincere doctor to show his appreciation and respect for his departed fellow workers who have faithfully performed their duties to humanity.

C. S. PETTUS,

F. B. KIRBY,

E. E. BARLOW, Committee.

CANCER CONTROL

Dewell Gann, Jr., Chairman

Mr. President and Members of the House of Delegates:

Your Committee on Cancer Control respectfully submits the following report of its activities:

1. A symposium on Cancer has been conducted at the meetings of twelve County Medical Societies. At most of these meetings papers on Cancer of the skin, breast, gastro-intestinal tract, bone and uterus were read. These meetings were only fairly well attended as a rule, indicating we think a lack of interest to a greater or less extent of this ultra important subject. Cancer literature has been mailed at irregular intervals to every member of this Association.

2. Lay activities have been limited on account of lack of finances with which we could purchase literature, stamps, etc. Through some laywomen, wives of physicians largely, several hundred copies of the pamphlet "How Education Pays in Cancer" were distributed at the State Fair. These pamphlets were furnished by the American Society for the Control of Cancer without cost to this Committee. Several large public meetings have been held and one of us has written two articles for the lay press on "Cancer is Curable" and sent them to the Gorgas Memorial Institute for release.

3. Such investigations into the use of colloidal copper, gold and lead have been made as possible and on one occasion one of us has had the opportunity of administering Koch's serum to a physician's sister at his request and his expense. Colloidal lead is not available. It is highly toxic and must be especially prepared. Colloidal gold was used in one case of Cancer of the thyroid gland in connection with incomplete removal and deep therapy. The result was unsuccessful. Eight cases of cancer, variously located, have died since receiving colloidal copper without any apparent benefit. The case treated with Koch's serum was an extremely advanced one of the mouth. She died a few days after receiving the injection without being seen. Her daughter stated the growth, which was protruding between the lips seemed to be shrinking.

4. The proceedings of the great meeting held at Lake Mohonk in September under the auspices of the American Society for the Control of Cancer will be published in a special number of Surgery, Gynecology and Obstetrics in the near future. The report will contain the twenty-eight formal papers read there.

5. There are now three standing offers of \$100,000 each for a cure for Cancer and Senator M. M. Neely of West Virginia has introduced a bill in the United States Senate to appropriate \$5,000,000.00 to be paid as a reward to the discoverer of a cure for cancer.

6. In conclusion:

- a. Cancer remains a clinical entity the cause of which has not been discovered.
- b. The hereditary problem is questionable.
- c. Transmissibility has been accomplished in lower animals only.
- d. And finally it is:

Insidious in its onset.

Painless in its incipency.

Local in its early stages when curable if properly treated.

Recommendations:

1. It is recommended that this committee continue its educational program and the society advance a sufficient sum of money to remove its handicaps, approximately two hundred dollars.

2. That the county medical societies give this committee closer co-operation.

3. That all members of the Society obtain and read the proceedings and papers read at the Mohonk meeting.

JOHN C. HUGHES,
JOHN S. JENKINS,
DEWELL GANN, Jr., Chairman.

Referred to the Council.

INFANT WELFARE

A. C. Kirby, Chairman

Apparently the only method we have of reaching out and doing good is through the individual county societies. The committee has the following to recommend:

1. The offer made by the Arkansas University Extension Service that a specialist make the rounds of districts giving a course of lectures, on diseases of infants and children, be carefully considered before rejecting, as much benefit would result to both physicians and their patients from its acceptance.

2. The holding of "Better Baby" clinics at least once a year by the county medical societies. At this time the babies are to be examined for defects and when found the parents are to be advised to take their children to the family physician for correction of same. We don't think that these clinics should treat them at that time or have anything to do with the treatment, but just to tell them that such and such is wrong, or such a condition is wrong and that they should take them to their family physician and let him further continue the case. In trying to treat them in clinics, you will get more trouble than you will do good. We recommend that they take the babies to the different family physicians, and you will find that the doctors will start in and co-operate with you and you will have a real good clinic.

3. Closer co-operation between the U. S. Infant Welfare Workers and the physicians of the community at the time these clinics are held. People that have been going around holding these clinics in these places don't try to interfere in any way with the doctor's treatment. They even try to keep away from making diagnoses as much as possible, but they do recommend that the babies or children be taken to the family physician and let him follow up and direct. It is surprising how many people think their children are in first-class shape when they are in very bad shape. It is the same as with people who, upon getting a medical examination for life insurance, find something wrong with them. Children don't do those things and this is the only method we have of getting in touch with the children.

Secretary Bathurst: As a matter of information, these reports are not open for discussion at this time. They are referred to the Reference Committee and, when their report is read, they are all open for discussion. If any member would like to confer with the Reference Committee in reference to such reports, they have the privilege of doing so.

Referred to the Reference Committee.

REPORT OF THE COUNCIL

Thad Cothorn, Chairman

Dr. Cothorn: We can't make our final report until the last session of the House of Delegates,

which will be on Friday, so that this report will be short.

Several things were considered at our mid-winter session of the Council and one of the more important things talked of was, what the legislative committee of the Society should do, or what were the views of the physicians at large, and the Council thought that, owing to the standardization of education, that the different schools of medicine finally be eliminated because, outside of just the theory of practice, they are all the same now. There is only one first-class eclectic school and one homeopathic left, and, if we had a composite board with a definite ratio of this, that and the other, that would perpetuate this division in our profession and make it a little bit troublesome and unwieldy, and it would be better just to pass that over and perhaps get a basic working bill and leave out the different systems of medicine.

Another thing that we considered at this meeting was the resignation of our efficient Secretary, Dr. Bathurst. His health had failed him quite a little bit, and he wanted to give up some of the work and at this meeting he offered his resignation. Your chairman appointed a committee composed of Drs. Ellis, Jones and Tarkington to confer with Dr. Bathurst and get him to withdraw his resignation, which they succeeded in doing, and he has been laboring on since that time.

Now, since this meeting of the Council, the only other thing that has come up to be handled by the Council was the certification of our delegates to the House of Delegates at A. M. A. The A. M. A. meets next week, and the delegates to the A. M. A. must be certified thirty days ahead of time. I certified our delegate whose time expires today, Dr. Bathurst, as being the official delegate from this Society to the A. M. A., Dr. Wood of Fayetteville, being the other; as my interpretation is that the delegate serves for the year in which he is elected. I hope that action I took is satisfactory to the House of Delegates. The main report will be made on the last day of the session. I thank you. (Applause).

Secretary Bathurst: A motion will be in order, Mr. President, to adopt this report and make it a part of our minutes at this meeting, approving the action of the Council at their mid-winter session as printed in the January issue of the Journal. Carried.

REPORT OF THE STATE BOARD OF MEDICAL EXAMINERS

J. W. Walker, Chairman

The State Board of Medical Examiners submits the report of its activities for the year of 1926. Two meetings were held during the year—the second Tuesday in May and November as prescribed by law.

At the May examination twenty candidates appeared, all were given the routine examination and all passed. Twenty-three students of the University of Arkansas Medical School, who had completed the sophomore year were examined in the Basic Sciences of Anatomy, Physiology, Chemistry, Pathology and Bacteriology; permanent records being made of the grades attained by them.

Twelve applications for license by reciprocity were approved and license issued. These candidates came from the following States: Tennessee, 4; Mississippi, 2; and one each from Texas, Ken-

tucky, Nebraska, Alabama, Oklahoma and Louisiana.

At the November meeting no candidates appeared for final examinations, but there were a large number of students who took the examinations in the primary branches. Also at this meeting twelve reciprocity licenses were granted as follows: Louisiana, 5, and one each from Kansas, Texas, Minnesota, Alabama, Oklahoma, Tennessee, and Illinois.

During the year the board endorsed the credentials of 27 Arkansas physicians who moved to other States.

The board notes with pleasure the high character of the men who now write its examinations—all are graduates of Class "A" Medical Schools—efficiently educated and trained and consequently few failures occur at its meetings. No one failed to pass in 1926.

Another source of satisfaction is the progress being made by the University of Arkansas in training its students for the practice of medicine. Its graduates are taking equal rank with those from the best Universities in the country. The recent State Board number of the Journal of A. M. A. gives statistics showing that during the year, 24 graduates of the University of Arkansas took the State Board Examinations in 6 States—namely, Arkansas, Indiana, Montana, New Jersey, New York and Oklahoma. There was not a single failure in any of these States. Nineteen of our men took the N. Y. Board, and each of them passed.

At the November meeting there were two revocation proceedings held by the board as follows:

(1) State v. Samuel H. Bourland, Arkadelphia, Ark., on a charge of chronic and persistent inebriety. Charge sustained and license revoked.

(2) State v. Dr. J. R. Kennedy, De Queen, Ark. on a charge of criminal abortion. The prosecuting witness completely reversed the evidence she had given to the Sevier County Medical Society, and the case was dismissed without prejudice to await the action of the Sevier County Grand Jury.

The board is under the impression that there are several men practicing medicine in this State illegally; that there should be more revocation proceedings held by the board than is customary, and that the law has been violated by one of the other boards in admitting to examination, and issuing license to men who are not graduates of reputable medical schools as the law prescribes. But the board cannot try cases unless charges are filed against offenders. We are ready to give any case a fair and impartial trial, that is brought before us in due form.

Some person or group of persons, not members of the board should be appointed to make investigations in every county in the State with the purpose of bringing to trial gross offenders against the Medical Practice Act. Would it not be advisable to have a committee on law enforcement in each county medical society and have a check up on all those engaged in the practice of medicine?

The State Medical Board of the Arkansas Medical Society has jurisdiction over its own licenses only, the graduates of regular medical colleges, or those engaged in the practice of regular medicine. It has no authority to revoke licenses issued by the Homeopathic or Eclectic Board. But it does seem that ways and means could be provided to reach these boards, and secure their cooperation in putting the practice of medicine in Arkansas, on a fair and equitable basis and eliminate once for all the practice of granting license to diploma mill graduates, or the unworthy can-

didate regardless of his origin, his medical education, or his moral worth.

Referred to the Reference Committee.

REPORT OF THE DELEGATES TO THE A.M.A.

Secretary Bathurst: There is no report. The last meeting of the A. M. A. in Dallas was before our meeting, and that report was made. The 1927 meeting will be next week.

REPORT OF SECRETARY

To The House of Delegates, Arkansas Medical Society:

The Arkansas Medical Society has had another prosperous and successful year.

The membership at the close of 1926 numbered 1,229. Another high mark.

The Journal published more pages and carried more advertisements than ever before. The income from this one source exceeds \$4,000.00.

Our financial statement shows:

Cash on hand at close of the last session	\$10,711.99	
Received for dues (since last session)	\$3,392.50	
Received for interest Secretary's account	46.55	
Received for interest Treasurer's account	215.11	
Received for interest Journal's account	77.26	
Received for interest Student Loan Fund	12.00	
Received for Advertising in Journal	4,081.70	7,825.12
	\$18,537.11	
Current expenses (list attached)	6,860.65	
Cash on hand	\$11,676.46	
Notes Receivable Student Loan Fund for 1926	\$ 250.00	
Notes Receivable Student Loan Fund for 1927	250.00	500.00
Balance to date	\$12,176.46	

The money collected in 1923 for the Gorgas Memorial is still held by the Secretary until we are advised by the A. M. A. that the Gorgas Memorial is on a permanent basis. With the accumulated interest to date the amount has increased to \$189.48.

Respectfully submitted,
WILLIAM R. BATHURST.

Referred to the Council.

REPORT OF TREASURER

My records show the following:

Balance reported at annual meeting, May 18, 1926	\$3,879.47	
Receipts for the year:		
July 2, 1926 received from the Secretary .....	..\$6,832.52	
July 1, 1926 interest on Savings Acct.	\$71.25	
Jan. 1, 1927 interest on Savings Acct.	143.86	
May 2, 1927 interest Student Loan Fund	12.00	
Total Interest	227.11	

Total receipts for the year	\$ 7,059.63
Grand total	\$10,939.10
Disbursements:	
Vouchers 219 to 247, inclusive	6,860.65
Balance on hand	\$ 4,078.45

R. J. CALCOTE,

Referred to the Council.

President Lemons: For the information of the members, if they don't know it, the seecretary and treasurer are well bonded so that this money is safe and well guarded if they are not safe.

Secretary Bathurst: Under new business, I would like to eall attention to two letters that have reciently reached my desk.

THE JOSEPH PRICE HOSPITAL
J. W. Kennedy, M. D.
241 North 18th Street, Phila.

April 12, 1927.

Dr. William R. Bathurst, Sec'y.,
Arkansas Medical Society,
810 Boyle Bldg.,
Little Rock, Arkansas.

My Dear Dr. Bathurst:

Would you be good enough to convey to the Arkansas Medical Society my appreciation for extending me the courtesy of honorary membership in their Society.

I have the very fondest memory of my visits to your State and my participating in your medical meetings, so I regard with unusual interest the courtesy extended me.

Thanking you, I am,
Faithfully,
J. W. KENNEDY.

TRINITY HOSPITAL
Little Rock, Ark.

April 30, 1927.

Dr. William R. Bathurst, Secretary,
Arkansas Medical Society,
Boyle Building,
Little Rock, Arkansas.

Dear Dr. Bathurst:

The Staff of Trinity Hospital extends a cordial invitation to all members of the Arkansas Medical Society and their families to visit Trinity Hospital on National Hospital Day, May 12th, which this year occurs during the meeting of the Arkansas Medical Society. There will be "open house" all day and the annual baby party will take place in the afternoon.

The hospital will be pleased to extend any courtesies to out-of-town members.

Yours very truly,
TRINITY HOSPITAL,
C. J. Snyder, Supt.

The selection of the Nominating Committee being in order, the following were chosen :

PERSONNEL OF NOMINATING COMMITTEE

First Councilor District—W. W. Verser, Harrisburg.

Second Councilor District—Sam J. Allbright, Searcy.

Third Councilor District—M. C. John, Stuttgart.

Fourth Councilor District—O. C. Hankinson, Pine Bluff.

Fifth Councilor District—J. A. Moore, El Dorado.

Sixth Councilor District—Don Smith, Hope.

Seventh Councilor District—Dewell Gann, Sr., Benton.

Eighth Councilor District—J. S. Kolb, Clarks-ville.

Ninth Councilor District—J. G. Gladden, West-ern Grove.

Tenth Councilor District—W. H. Mock, Prairie Grove.

Secretary Bathurst: Vacancies occurring on the Board of Medical Examiners this year are the following: First Congressional District, Dr. Cothorn; Fourth Congressional District, Dr. Toland; Fifth Congressional District, Dr. Hunt. Cothorn and Hunt have each served one term. It is customary for members to serve two terms. In the Fourth Congressional District, Dr. Toland has served two terms, and it is proper for a new member to be selected in his stead.

Dr. Gann, Sr., was chosen chairman of the Nominating Committee and Dr. Mock, secretary.

The House of Delegates adjourned until the last day, Friday, at 1:30 o'clock, p. m.

CITY PARK

Friday, May 13—11:00 to 12:00 A. M.

Unveiling of Monument to First Human Dissection in Arkansas—In charge of Committee, J. H. Lenow, Little Rock, Chairman.

ARKANSAS MEDICAL SOCIETY

Office of Secretary

Little Rock, July 17, 1927.

Dr. J. H. LENOW, Chairman
Dr. Robert Caldwell, Little Rock
Dr. J. P. Runyan, Little Rock
Dr. H. Moulton, Fort Smith

Committee for placing marker tablet in the City Park, Little Rock, in commemoration of the spot where the first legalized dissection in Arkansas was performed.

DEAR DOCTOR:

I take pleasure in advising you of your appointment by our President as a member of the above committee to serve during the present term, 1926-1927.

Please let us know if it will be agreeable to you to accept this honor and perform the duties incumbent upon you faithfully and competently.

With my kindest personal regards and best wishes for your success, I remain

Sincerely yours,

Wm. R. BATHURST,
Secretary

DR. JAMES H. LENOW
1218 West Third Street

Little Rock, Ark., July 24, 1926.

To the Honorable Mayor and Members of the City Council, Little Rock, Ark.

GENTLEMEN:

The Arkansas Medical Society at its annual meeting in May last, took action, and made an appropriation to place a tablet or some appropriate memorial in marble on the spot where the first legal human dissection in this State was made during the month of November, 1874. The spot is located on the margin of the second circle south of the present buildings now standing in our City Park, and indicated by an iron pin.

The committee, of which I am chairman are having designs submitted in white marble, and doubtless will erect something not only appropriate, but ornamental, occupying about three feet square of the ground.

Other medical educational centers throughout the country have placed such memorials, and Arkansas wishes to do likewise. In behalf of this committee, of which I am chairman, wish permission to place this tablet on the ground indicated in our City Park.

Respectfully submitted,

JAMES H. LENOW.

CITY OF LITTLE ROCK

Horace A. Knowlton, City Clerk

Little Rock, Ark., August 26, 1926.

Dr. James H. Lenow,
1218 W. Third St.,
Little Rock, Ark.

DEAR DR. LENOW:

I am instructed by Mayor Chas E. Moyer, and Mr. Henry G. Leiser, Chairman of the Parks, Buildings and Grounds Committee of the City Council, to notify you that your petition for permission to place in the City Park a memorial tablet designating the spot where the first legal human dissection in this State was made, is granted, the same to be under the supervision of Mr. B. E. Rambo, City Superintendent of Parks and Sanitation.

When you are ready to take this up with Mr. Rambo he will be glad to consult with you.

Yours very truly,

H. A. KNOWLTON,
City Clerk.

HAK:VT

Copy to Mr. B. E. Rambo,
Supt. of Parks and Sanitation.

RB:PVS:442.

WAR DEPARTMENT
The Adjutant General's Office
Washington

STATEMENT OF THE MILITARY SERVICE OF
RICHARD SWANTON VICKERY

Born at Bantry, Ireland, December 7, 1831
Appointed from Michigan

Private, Company "F," 2d Michigan
Volunteer InfantryMay 17, 1861
To.....Aug. 31, 1862
Assistant Surgeon, 2d Mich. Vol. Inf...Sept. 1, 1862
SurgeonSept. 19, 1864
Honorably mustered out.....Mar. 11, 1865
Assistant Surgeon, Regular Army....May 14, 1867
AcceptedJuly 14, 1867
Captain, Assistant Surgeon.....Dec. 28, 1867
Major, SurgeonOct. 8, 1883
RetiredDec. 7, 1895
Lieutenant Colonel, Retired.....Apr. 23, 1904
AcceptedMay 28, 1904

SERVICE AS AN OFFICER:

He was on duty with regiment in Maryland with Stoneman's Division, 3d Army Corps, from September 1 to November 30, 1862; sick in Hospital, Georgetown, D. C., to January, 1863; with regiment in Virginia, in March, 1863; in the field in 9th Army Corps, to February, 1864; on duty in the Surgeon General's Office, this city, to May, 1864; in field with regiment in 9th Army Corps,

to July, 1864; wounded in battle before Petersburg, Virginia, July 30, 1864; absent from regiment on account of wounds to date of muster out of Volunteers.

He was on duty as Surgeon, Fort Union, New Mexico, from June to August 1867; at Fort Wingate, New Mexico, to May 14, 1870; on leave in Ireland, to October 29, 1870; Post Surgeon, Fort Wingate, New Mexico, to October, 1872; in New York City and at sea on board Steamer Magnolia with Detachment, 3d Cavalry, to December 1, 1872; Post Surgeon, Jackson Barracks, Louisiana, to January 26, 1873; at Key West Barracks, Florida, to December 18, 1873; at Jackson Barracks, Louisiana, to June, 1874; Post Surgeon, Little Rock Barracks, Arkansas, June 16, 1874 to May 28, 1877; at Fort Schuyler, New York, and Mauch Chunk, Pennsylvania, to October 24, 1877; at Fort Hamilton, New York, to April 5, 1878; on leave in Ireland, to September 5, 1878; Post Surgeon, Plattsburg Barracks, New York, to October 8, 1879; at Fort D. A. Russell, Wyoming, to October 23, 1883; at Fort Townsend, Washington, to September 26, 1884; at Vancouver Barracks, Washington, to January 12, 1886; on duty at Hot Springs, Arkansas, in connection with completion of Army and Navy Hospital (and Surgeon in Charge of Hospital from July 4, 1886) to May 8, 1888; on leave in Europe to October 26, 1888; Surgeon in Charge, Army and Navy General Hospital, Hot Springs, Arkansas, October 27, 1888 to November 2, 1891; Post Surgeon, Fortress Monroe, Virginia, to date of retirement.

In the records at different times during his active service the fact that he is married is stated; whether or not there were children does not appear. Telegram from Riverton, New Jersey, in 1906, announcing his death was signed, Elizabeth



Monument placed in the City Park, Little Rock, by the Arkansas Medical Society at Fifty-second Annual Session, May, 1927.

Vickery, relationship not given.

He died at Riverton, New Jersey, January 3, 1906.

ROBERT C. DAVIS,

Major General,

June 18, 1926.

The Adjutant General.

DEDICATION OF MARKER TO COM- MEMORATE FIRST DISSECTION

Dr. J. M. Lemons, President of the Arkansas Medical Society, Chairman, stated the object of the meeting and introduced Dr. Frank Vinsonhaler as the principal speaker for the occasion:

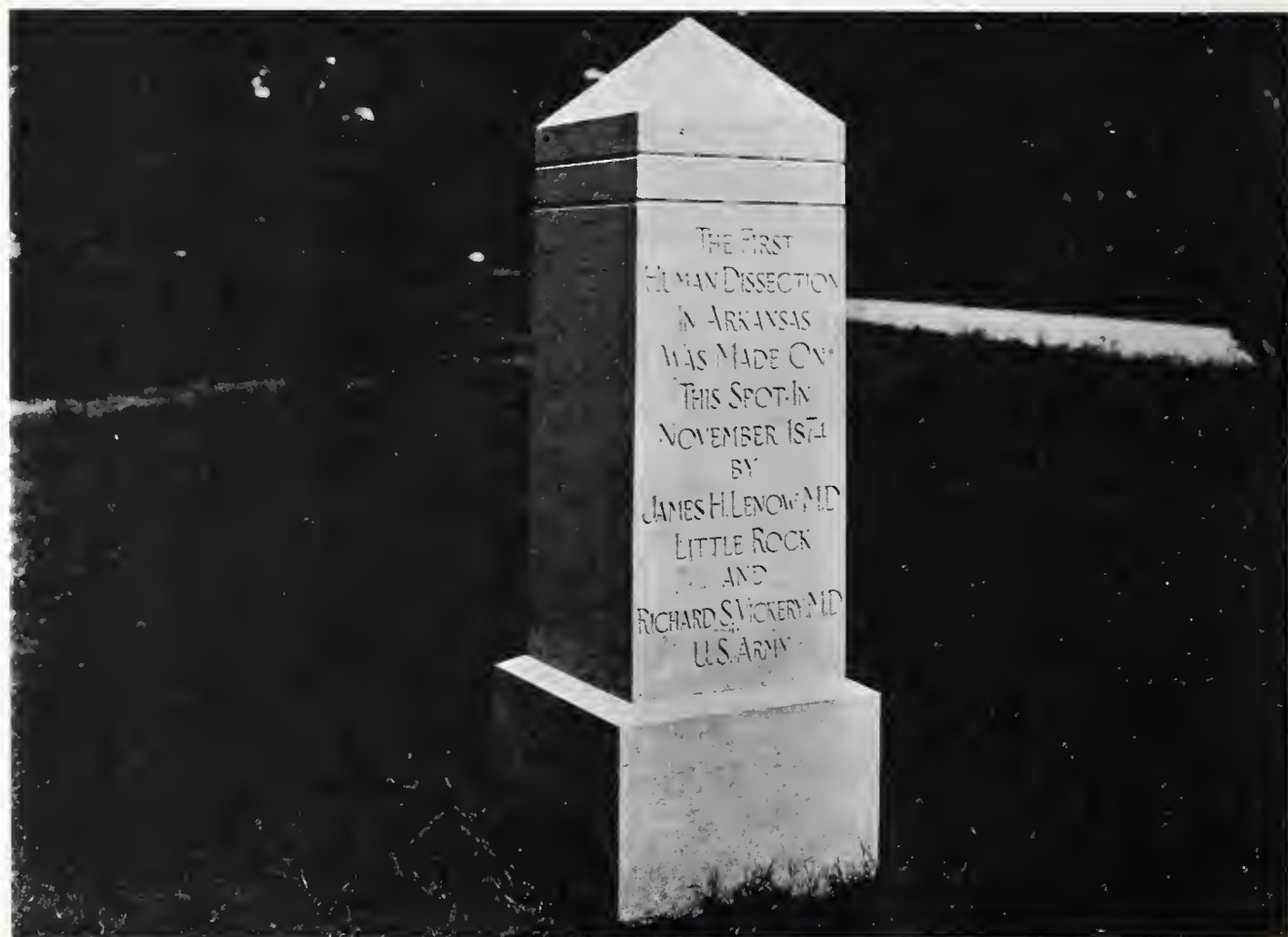
Mr. President, Ladies and Gentlemen:

I appreciate the high honor of being privileged to make an address to you on this occasion, I must confess that it was with a great deal of temerity that I undertook this task. The occasion is an unusual one. Although it has been done in other places, I believe that this is at least the first time a monument of this kind has been unveiled in this State.

The history of medicine has been marked with landmarks of progress. Even in my time I cannot recall the great changes that have occurred, during the last half century. This monument erected to mark the spot of the first human dissection in this State is full of interest. This dissection was made in December, 1874. Previous to that time, with the view that a medical college should be organized in Little Rock, the Legislature of the State was memorialized to pass a law per-

mitting human dissection. That was done and it became therefore legally possible in this State. The medical college was not established until several years afterwards and proper setting for this memorable event was made possible. The ground was occupied by the United States Government as a supply depot for ordnance and artillery equipment, consisting of a large brick building and other structures. In one of the buildings located about where I stand the first dissection took place. The record shows that the dissection was made by two officers of the U. S. Army. Dr. Lenow, who took part in the dissection is the sole survivor of the event. Dr. Lenow prepared the specimen in due course at the request of Dr. Vickery, then in charge of the post. Ever since that time Dr. Lenow has been a loyal supporter of medical effort in this State. When I first came here in 1893 he was earnestly promoting the medical school and contributing his best to put Arkansas in the front rank of medical progress. Right here I would like to mention one other who was intimately identified with the medical school and one of its guiding spirits and that was Dr. James A. Dibrell. Many of the men who are seated in front of me will remember him and that he taught anatomy to the profession of our State during his lifetime until his death—for he literally died in the harness. Dr. Dibrell was of Huguenot extraction. There was in every fiber of his being, that stern loyalty to duty, characteristic of those great liberty-loving, God-fearing people, who helped to lay broadly and deeply the foundations of our beloved country. Love, devotion and loyalty were exemplified in his life and character. "We shall not soon see his like again."

I remember visiting New Orleans some years ago and going through Jackson Square, I saw the



Monument placed in the City Park, Little Rock, by the Arkansas Medical Society at Fifty-second Annual Session, May, 1927.

statue of General Andrew Jackson, bearing the inscription, "He saved the City of New Orleans." By his brave stand against Packenham he saved it from pillage and loot and from the domination of the oppressor. All honor to this valiant soldier.

I thought of the time when the death angel hovered over the stricken city of New Orleans and the dread yellow fever held it in its grip. I thought of it as the metropolis of the South, with its commerce and ships from all over the world loading and discharging at its wharves. I thought of the time when this pestilence took possession of the city, destroying its commerce and isolating it from the outside world. I thought of those courageous, daring, self-sacrificing men, Lazear, Carroll, Reed and Agramonte, whose noble work set in motion such agencies that will forever safeguard the Crescent City and the nation from a recurrence. I was disappointed that in view of the thrilling experiences of that most heart-rending situation when its commerce was destroyed and its people stricken with pestilence that there was no marker or monument of granite, marble or bronze in grateful commemoration of the work of those who wrought well and faithfully. Some day it may be done and some token given of the love, honor and respect they should manifest to their greatest benefactors. It is especially befitting that Arkansas should show her appreciation of the endeavors of those who understand and those who know and who realize the importance of ethical pioneer work of this character. May the little marker that we today unveil be a constant reminder of the noble efforts of those faithful ones who devoted their time and talents to the progress of their chosen profession and to the welfare of the community; so that future generations may be inspired by the record of those earnest workers who preceded them and that honor be given to whom it is due.

At the close of Dr. Vinsonhale's address Chairman Lemons came forward and unveiled the monument in behalf of the Arkansas Medical Society.

HOUSE OF DELEGATES

THIRD DAY

Friday, May 13, 1927.

The House of Delegates was called to order by the President, Dr. Lemons, at 1:30 p. m., a quorum being present.

The report of the Nominating Committee was the first order of business.

REPORT OF THE NOMINATING COMMITTEE OF THE ARKANSAS MEDICAL SOCIETY

Dr. Moek: In submitting this report, and in considering the prospective candidates for these various offices, we endeavored to select men that were endowed with imagination, qualifications and peculiar fitness for the various offices.

For President-Elect

R. H. T. Mann, Texarkana.
Thad Cothorn, Jonesboro.
Thomas Douglass, Ozark.

For First Vice-President

Homer Scott, Little Rock.

For Second Vice-President

J. B. Wharton, El Dorado.

For Third Vice-President

O. J. T. Johnston, Batesville.

For Secretary

William R. Bathurst, Little Rock.

For Treasurer

R. J. Calcote, Little Rock.

For Delegate to A. M. A.

William R. Bathurst, Little Rock.

For Councilors

First District—W. W. Verser, Harrisburg.
Third District—M. C. John, Stuttgart.
Fifth District—L. L. Purifoy, El Dorado.
Seventh District—Dewell Gann, Sr., Benton.
Ninth District—Sam G. Daniel, Marshall.

Respectfully submitted,
DEWELL GANN, Sr., Chairman,
WILL H. MOCK, Secretary,
Committee.

President Lemons: We will now proceed to ballot for president-elect. I will appoint Drs. E. H. White, J. L. Smiley and J. C. Graves as tellers.

Thereupon the House of Delegates proceeded to ballot upon the three names selected by the Nominating Committee, Drs. R. H. T. Mann, Thad Cothorn and Thomas Douglass, for the office of President-Elect.

After two ballots had been taken without a choice being made, the name of Dr. Douglass, at his request, was dropped.

Upon the third ballot, Dr. Mann received a majority of all votes cast, and he was declared elected as President-Elect.

President Lemons: Dr. Cothorn and Dr. Douglass will escort Dr. Mann to the Chair. (Applause).

Dr. Mann: Mr. President and members of the Arkansas Medical Society: I want to thank you for the very great honor which you have bestowed upon me. No man in the Arkansas Medical Society has ever gotten as many votes as I have in the aggregate not to have been elected president-elect up to this time and I am wondering who in the future is going to take the second run-off place for a great many years. This is what I want to say: I realize the honor which you have conferred upon me. I also realize the very great responsibility which you have also placed upon my shoulders. The medical laws of the State of Arkansas are in a chaotic condition. The coming doctors of our State and those living

in our State now can never practice medicine under the best conditions until those laws are changed, and the two million people now living in the State of Arkansas, over whose health you are guardians, are not getting the services which are due them as long as quacks are allowed to slip in through different schools and practice medicine in this State. Now, gentlemen, what can be accomplished with your assistance is that the health laws, the health conditions and the practice of medicine in the State of Arkansas can be made as good as any other State in this Union. I want to say right now that, if the Arkansas Medical Society will get under, and if all of us will get under, our laws, we will set in motion certain things which will bring about an ideal condition in this State. And I think, if we cannot accomplish it, if we can begin it, if we can make a campaign over this State and get the people in behind us and elect representatives or get those elected who are committed to the policy of sane medicine, before the next meeting of our Legislature, we can go to the Legislature and get any law that is reasonable if we will only ask for it. Now, that is the great duty of this Society and that, with your help, is what I want to accomplish. I thank you. (Applause).

President Lemons: You know it has been our custom that the other candidates for office be elected by acclamation, as they have no opponents.

Dr. Barlow: I move that they be elected by acclamation. Carried.

President Lemons: The next is reports of committees that have not heretofore reported.

REPORT OF COMMITTEE ON STUDENT LOAN FUND

To the House of Delegates, Arkansas Medical Society:

GENTLEMEN:

The Committee on Student Loan Fund continues to function according to the rules governing its administration, as reported last year and published in the Journal, July, 1926.

We made a loan to a worthy student last year for \$250.00, and the same amount this year. This young man is in the junior class, Medical Department, University of Arkansas, and is keeping up with his studies to the satisfaction of all concerned.

We propose to offer this applicant additional financial assistance until he graduates. The notes draw interest and are payable on or before January, 1929.

The Committee recommends that the fund for this purpose be increased as our finances justify.

Respectfully submitted,

E. F. ELLIS, Chairman,
J. H. LENOW,
G. A. WARREN,
Wm. R. BATHURST.

On motion the report was adopted.

HEALTH AND PUBLIC INSTRUCTION

C. W. Garrison, Chairman

Mr. President, Honorable Members of the House of Delegates of the Arkansas Medical Society:

SIRS:

Your committee, if it should make an honest confession would admit that as a committee it has been somewhat derelict in promoting public health education, due chiefly to its chairman. But since it is customary for individuals, committees, and organizations to take credit for all that has been done in its particular line of endeavor your committee will likewise take certain liberties.

During the past year a notable piece of work was done by almost the entire personnel of the Arkansas Medical Society in co-operating most heartily and effectively with the State Board of Health in its drive to get into the U. S. Registration Area for births and deaths, and Arkansas is the first State to be accepted on both births and deaths at the same time. To some physicians it may not be a matter of great consequence, but suffice it to say that a birth or death certificate is now regarded as a most important official document by all Governments. Therefore, when an official check-up shows 90 per cent registration it is evidence that registration is meeting a minimum standard. Your committee would like to urge that every member of the Arkansas Medical Society exercise the greatest care in filling out completely a certificate of birth whenever he attends a case of confinement, and sign a death certificate for each death attended. The State is now making transcripts of births and deaths for the Federal Government, and whenever there is an error, an omission, or an incomplete diagnosis entered, a query will be sent to the doctor in attendance for correction. Care should be exercised in listing the primary and contributory causes of death. Any physician desiring the "Physicians' Pocket Reference to the International List of Causes of Death," published by the Bureau of the Census, will be furnished same on request to the State Health Officer.

Your Committee further requests that prompt reporting of notifiable diseases to the proper authorities be conscientiously adhered to, as it is only through the prompt reporting of communicable diseases that the health authorities may intelligently and promptly prevent the spread of same.

The Arkansas Medical Society is committed to a program of preventive medicine. Morbidity reports are primary and fundamental in this regard.

Full time health officers with a reasonable working personnel are now regarded as paramount in every county if preventive measures are to be efficiently administered. Arkansas has only five counties thus far organized, while its sister States have made rapid strides in that direction. While many of the part-time health officers have done splendid work, even sacrificing their practice in some instances, they cannot be expected to neglect their practice when they are dependent on same

for a livelihood, and paid at best only a nominal salary for their services. It was shown recently that in the counties in the now devastated flood areas of the Mississippi Valley those counties having a full-time health department were more able to meet the present emergency than the counties not so organized. It is therefore recommended that the House of Delegates draft a resolution to be adopted by the Society as a whole, urging that in so far as possible every county establish at an early date a full-time health department.

Your committee also recommends that your Legislative Committee confer with the State Board of Health authorities in drafting suitable legislation to strengthen the law regarding the appointment of county health officers at the present time, as the Supreme Court has held that the County Judge cannot be compelled to approve appointments, and since the Judges fix the salaries under the present law they dictate completely the appointments. It would seem wise for the State to make an appropriation to subsidize the salaries of such health officers and thus be able to strengthen and improve the service.

It is further recommended that your honorable body go on record as favoring the present campaign to inoculate the public against typhoid and smallpox throughout the flood area, as thousands of people have been assembled in close proximity, many unknown exposures have occurred, and there is a potential danger in all water supplies, public and private, which have been inundated by the present floods.

Your committee further recommends that the Committee on Health and Public Instruction be changed to Public Health Education, as individuals and organizations without the State interpret the present wording to mean medical instruction, and a query was received from the A. M. A. so indicating.

Respectfully submitted,

C. W. GARRISON, Chairman.

Secretary Bathurst: I move that the report be received and filed in our minutes, with the exception of the last paragraph. It provides for a change in our Constitution and By-Laws, changing the name of this standing committee from "Committee on Health and Public Instruction" to "Public Health Education." Has the A. M. A. recommended that change?

Dr. Garrison: I had several communications from the authorities up there requesting information and wanting to know what this committee was doing on medical education.

Secretary Bathurst: This committee is not doing anything on medical education. It occurs to me that that is a very splendid suggestion. I move that the report be received and filed, except the last paragraph and, as that changes the Constitution and By-Laws, it will have to lie over until next year for a vote. We can receive and file the report and then a separate resolution can be introduced to change our by-laws to read as recommended.

Dr. Douglass: I second that motion.

Dr. Hunt: Does that have to be presented at this time?

Secretary Bathurst: Yes.

Dr. Hunt: I move that we adopt this report and leave off that recommendation to change the name of the committee.

Seconded.

Dr. Anderson Watkins: That doesn't change the committee at all.

Secretary Bathurst: There's a motion before the House that the report be received and filed.

Carried.

President Lemons: We are open for a new resolution if you want to change the Constitution.

Hearing none we next have the final report of the Council.

Chairman: According to custom, the Council has met every day at noon. On Wednesday, a quorum of the Council was present and received reports from various districts, which showed them to be in healthy condition, with many district societies organized and meeting.

Dr. Sam Daniel, successor to Dr. Kirby, in the Ninth District, reported that he was confident that he would be able to organize Van Buren, Stone and Newton Counties.

Dr. Thos. Douglass, Councilor of Tenth District made the following report:

I did not get my instructions in time to visit all the counties of the district. I hope at next meeting to report having visited each one. I had the pleasure of attending the annual meeting of the Sebastian County Society at which a most excellent dinner was served, and motion pictures delineating ulcers of the stomach were shown. The pictures were interesting and instructive. There were about twenty-five present, physicians from Sebastian and neighboring counties. The Washington-Benton County Societies held the second of their annual joint meetings with distinguished clinicians on the program.

Subjects of practical importance to the members were very ably and interestingly discussed. These meetings constitute an important advance in county society programs and in bringing clinical work and instruction to the general practitioner. These counties: Washington, Benton, Sebastian and Crawford are to be commended for their work in this direction. The Fayetteville meetings were attended by about one hundred doctors, many from the neighboring counties being present in response to the courteous invitation.

I attended the annual meeting of the Crawford County Society at which a most appetizing dinner was served and a very interesting program given. Drs. Carruthers, Rhinehart and Hoge of Little Rock, contributed excellent papers illustrated with lantern slides.

I have no report from Madison County.

There is no organization in Logan County. In January there was a meeting held at Ratcliff attended by one dozen doctors of Logan and South Franklin Counties. They effected an organization the main purpose being better collection of bills. A secretary was elected at a salary of \$75.00 per month and the members were assessed \$5.00 each per month to pay expenses. There was no second meeting and so a brave effort came to naught.

We have not been able to get the South Franklin members to attend meetings of the Franklin County Society and only a few pay dues. We have offered several times to hold meetings at Charleston or Branch, but get no response.

In counties like Franklin, Madison and Logan it is difficult to get regular attendance and hard to have interesting programs that will be an inducement to the members to attend. Franklin County has nine members paid up and eight who have not paid, two eligibles and one chiropractor.

Benton County has 31 members paid up, 5 suspended for nonpayment of dues, 2 not members who are eligible.

Sebastian County has 48 paid members, 10 non-members, 4 chiropractors and other irregulars.

Drs. John, Douglass and Cooksey were appointed as the Auditing Committee, to whom was referred the reports of the Secretary and Treasurer.

The Committee on Cancer Control was allowed the sum of \$100.00 for the ensuing year. Heretofore it has been allowed \$50.00. Bills from Drs. Lemons and Cothorn for postage amounting to \$5.00 in one instance and \$9.60 in another were allowed. The secretary was authorized to pay all bills incidental to this meeting, and his honorarium was increased \$300.00 a year.

A communication from Dr. Fraser of McCrory was read and discussed and Dr. Thibault was authorized to advise with Dr. Fraser and answer him. On motion, the Council adjourned.

At the meeting of yesterday, all the councilors save one were present. Dr. Seale Harris of Birmingham, Ala., was a guest of the Council. Dr. Harris commended the Society on the efficient work they were doing and paid a high tribute to our secretary.

Some more reports from various councilors that were absent the first day were received, and they stated some of the difficulties they had with their districts in the county secretaries failing to answer their letters or to give them any co-operation. And I urge you secretaries of the county societies to answer letters from your councilor and help him to visit your meetings; at least, notify him of the date you are going to meet, and the place.

The Auditing Committee reported that they had examined the books and accounts of the Secretary and Treasurer and found them to be regular and correct in every detail.

The sum of \$200.00 was set aside for the purpose of paying for subscriptions to the journal *Hygeia*, copies to be sent to those to whom the secretary in his discretion may select. On motion, the Council adjourned.

The Council met in final session at noon today.

A motion was made and passed that the secretary be empowered to pay the additional expenses of any of the Program Committee. Some expenses of some of the invited guests had to be paid, and this committee was allowed \$100.00. It may be that there will be additional expense that the secretary is empowered to pay.

After some discussion at various meetings and times, the Council thought that the time was opportune to inaugurate and establish some machinery for the enforcement of the present medical act, and they think that we should begin by a general house cleaning. It is inconsistent for the pot to call the kettle "black." Many irregularities have been reported to us. There are a good many rumors about members of the regular profession being irregular. It seems to be the tendency in some places for some leaders of our profession to fraternize and work with these irregular men in order to get their referred work. Washington County seems to be the pioneer county society that has taken definite action towards taking the members to task who do work with these irregulars to get a little fee from their referred work. We suggest that there be some action taken in some of the other county societies. My own society is not immune, and it seems to be that as much or more of this goes on in the bigger centers than out in the smaller communities.

The Council's wish was put in the form of a resolution offered to the House of Delegates that the President be empowered to appoint an additional committee as none of the standing committees seem to have the authority to initiate this work. And let this additional committee be called by whatever name you see fit, and let this committee have the power to employ an attorney and begin if necessary to get evidence and get busy. And we wish the profession to get in behind the work as it gets started and to co-operate with your of-

ficers and your State Board of Examiners. The Examiners are only a committee of your State Society, and like the other committees, their duties are outlined and they have no power to initiate and start certain proceedings. It is the same way with the State Board of Health.

The Council wishes to offer this resolution, that the President of the Arkansas Medical Society be empowered to appoint such committees as he sees fit, especially a committee on law enforcement.

Dr. Thibault: I believe there was a discussion about an appropriation for the use of that committee and possibly the Board of Medical Examiners. And I believe it is a good idea to have Dr. Cothorn incorporate that appropriation clause in this resolution before it is submitted to the House of Delegates.

Dr. Cothorn: Dr. Thibault's suggestion, I think, is timely. The Council understand it, but perhaps the House of Delegates does not. This law enforcement committee would assume the power of enforcing the law and it would relieve the medical board of having to do that. In other words, they wouldn't get in each other's way. All the enforcement and initiative should be begun by this committee and not by the board.

Dr. Hunt: I am in favor of the committee. I don't think I am quite in favor of putting a lawyer on a full-time salary. I think we should save the Society some money. Every local society knows all of the irregulars in their county and if each local society would make this list of these irregulars and those who have come into the State from the Kansas City Eclectic school and send those names in to the chairman of the committee or some one that the president will appoint, then we could get all these facts compiled and then we can employ some lawyer and go to prosecuting them, and save this lawyer going around hunting for evidence. There was just one instance in my county and the county handled it without any expense to the State Society at all. There is no use to have a man come up there and investigate him. I will attend to that myself. Every county society can attend to its own irregularities and, if they get up against it, we can have a lawyer take care of the situation. I don't see where it would be necessary to hire a full-time lawyer.

Secretary Bathurst: The local society for some reason or other does not seem to act.

Some stranger has to come into your midst and clean up.

Dr. Hunt: If this committee will write to the secretary of each county society and tell him what they are trying to do, and ask him for a list of those irregulars, will not the secretaries answer him?

Dr. Drennen of Stuttgart: I don't think that the delegates understand this very thoroughly. If you are going to attempt house cleaning, as you call it, out in the rural districts where we have different cults, we are going to have to fraternize with them in some way. If we are called in consultation, what are we going to do? Are we going to meet with them? Now, the laity don't understand these things like we doctors do. Those of you who have been up against those things know just exactly what I am speaking of. I have never seen an irregular yet who wanted a consultation from a local doctor and couldn't get it, but what could get it from a regular in Little Rock. They are only too happy to come from the larger places. I think this thing should be threshed out thoroughly before we go too far.

Dr. Hunt: The doctor mentioned the fact that it is easy enough to get consultants from some of the larger cities. We doctors in the country don't have much competition out there. Each local county society will have to do like Washington County. They won't meet in consultation with those irregulars or eclectics from the Kansas City School. I have been told by three or four responsible parties that there was one large hospital in Little Rock that only has three internes, graduates of that Kansas City Eclectic school. I don't know whether it is true or not. Those conditions ought to be investigated.

Dr. Mann: Is there any way to stop these men from appearing in the State of Arkansas? Can he not practice under the eclectic law or the homeopathic law or the chiropractic law?

Dr. Watkins: That question by Dr. Mann leads to the reason for the recommendation by the Council. We are not lawyers. We need legal advice. That committee or any member of the Society needs legal advice as to what we can or cannot do after investigation. I believe that is an argument in favor of the adoption of this resolution.

On motion report of Council was adopted and resolution carried.

Dr. Hoge: I have some new business that follows rather closely the action of the Council, in that it seems we are out now for the scalp of the irregular practitioner. While we have attacked the question in a legal way, that probably is not the best and most helpful method of attacking it. The best way to get rid of those people is to get the public sentiment against them and starve them out like they did over in Texas. The best method is through the Press. We are going to need the Press before we get through. I believe, if we look over our Constitution, we won't find in it where we can use the Press. I therefore offer the following resolution,

“RESOLVED that the Constitution and By-Laws be amended so as to include a Publicity Committee.”

THEREFORE the following amendment is proposed to add to Chapter VIII, Section I, page 19, to include among the standing committees, that of “A Committee on Publicity.”

Secretary Bathurst: Resolutions to make a change in the Constitution and By-Laws are not open for discussion. It will lie over until next year, to be published three times in the Journal during the year and to be voted on at the next meeting.

Dr. W. L. Holt: Is it necessary to pass the resolution in order to have that change published for three times in the Journal? I am very strong for that idea of a publicity committee.

Secretary Bathurst: No.

REPORT OF THE REFERENCE COMMITTEE

We, your Reference Committee, beg leave to submit the following report:

We endorse the President's Address, and commend him for his zeal and loyalty to organized medicine.

We approve the reports of the various committees and point with pride to the splendid achievement of our State Medical School and the recognition it has received and the wonderful record shown by its graduates as evidenced by the report of the State Board of Examiners.

We desire to thank the entertainment committee and the officers of our society and all those who contributed toward the success of our meeting. We wish to extend our appreciation to Dr. Bathurst for his efficient services in the conduct of the affairs of our Society and his management of the State Medical Journal.

We wish further to call attention to the report of our Legislative Committee and urge that the Medical Practice Law be strenuously and rigidly enforced as has been done in Connecticut. By so doing, we will protect the health and welfare of

humanity and preserve the honor of our State and the dignity and reputation of our profession.

Respectfully submitted,

DON SMITH, Chairman,
WILL H. MOCK,
S. F. HOGE, Committee.

On motion, the House of Delegates adjourned *sine die*.

GENERAL SESSION

FIRST DAY

The General Session was called to order at 1:30 o'clock, p. m., Wednesday, May 11, 1927, by Dr. Lemons, President.

Invocation by the Very Reverend John Williamson, Dean of the Trinity Episcopal Cathedral.

Our Heavenly Father, Who didst promise health to Thy people gathered together in Thy Name, we beseech Thee to be with Thy servants, the doctors of medicine here assembled. We rejoice in the tireless efforts that many of our doctors are now making in threatening the great slayers of mankind with the white light of Science. Grant that under their teachings we may grapple with the things which have ever dealt death to the race and that we may so order the life of our communities that no one may be doomed to an untimely death for lack of the simple gifts which Thou hast given in abundance.

Make Thou our doctors the prophets and soldiers of Thy Kingdom, which is the reign of cleanliness, self-restraint and the domination of health and joyous life; strengthen in their noble profession the consciousness that their calling is holy and that they are all disciples of the saving Christ. Though they deal with the frail body of man, may they have an abiding sense of the eternal value of the life residing in it, that by the call of faith and hope they may summon to their aid the mysterious spirit of man and the operation of that all-pervading vital life.

We ask this in the name of our Saviour, Jesus Christ.

ADDRESS OF WELCOME

By HON. CHAS. H. BROUGH

Ex-Governor of Arkansas

Dr. Brough: Dr. Lemons, and gentlemen of the Arkansas Medical Society: I deeply appreciate the honor conferred upon me by my friend and neighbor, one of Arkansas' most efficient physicians, Dr. Homer Scott, to give the address of welcome to the representatives of the 1,229 members of the Arkansas Medical Society, representatives of the 2,103 licensed physicians who are now practicing in the State of Arkansas. No science has made more noble record or more rapid progress than has the science of medicine, particularly within the past three centuries. In Shakespeare's time, Gaunt was referred to as “Old Gaunt,” at the age of 50, and Kolenyi, who was assassinated at the age of 53, was referred to by a contemporary biographer as being in his dotage. Today, by virtue of the wonderful contributions to medical science, it is not unusual for the majority of our citizens, or at least a large percentage of our citizenship, to pass the age

of three score years and ten, and in every State of the Union there are those who have reached and passed the century mark.

A century ago in the United States there were only three medical colleges, two of any recognized standing, those of Harvard and the University of Pennsylvania. Today there are eighty-eight well established and recognized medical colleges and institutions in the United States, typified by such great institutions as the Johns Hopkins, the Jefferson Medical, Washington University, Tulane University, University of Michigan and others which deserve mention.

A century ago there were only about 1,350 practitioners in the United States. Today we have approximately 160,000, with over 94,000 who are members of the great American Medical Association. The wonderful contributions of such medical authorities and scientists as Wm. A. Pusey of Chicago in the field of dermatology, Matas of our own Tulane, the Mayo brothers who have reflected such credit upon American medical achievement and medical jurisprudence, are but a few of the scientists that have made notable contributions to your great field.

As the War Governor of Arkansas, I feel particularly grateful to the physicians of the State for the very signal services that they rendered during a very trying period in the nation's crisis. In each of the 75 counties of the State of Arkansas three physicians served an advisory medical board and on each of the exemption boards in the seventy-five counties of the State of Arkansas a physician served, so that, in addition to the personal services of the physicians of the State of Arkansas, over 300 of them served the Nation and the State in a very efficient capacity during the eighteen months of the conflict between human liberty and human democracy and those who sought to destroy it.

I remember with a great deal of pride that the State institutions at that time, as at this time, were manned by very competent physicians. I had the honor of appointing one of your members, Dr. Kirk, Superintendent of the State Hospital for Nervous Diseases, a very worthy successor to another very distinguished member of your Society, Dr. Greene, who is internationally known in his particular field, and these gentlemen, with Dr. Brown, the present superintendent, reflect high credit upon the type of Arkansas medical lore. And every State institution was manned by a very competent physician.

In this present crisis, and it is the greatest crisis, gentlemen, that Arkansas has been confronted with since the Civil War, in this present crisis of tornadoes and of floods, when our people have lost approximately one hundred of our citizens, when approximately fifty millions of dollars of property value have been destroyed, when there are approximately thirty thousand refugees that will perhaps call upon the Red Cross for contributions exceeding five million dollars, in this great crisis the physicians of the State of Arkansas are rendering a very signal service. Our State Board of Health, organized fifteen years ago, and presided over by a very competent physician, a man of national renown, Dr. Garrison, is mobilizing the physicians of this State in every county and in every community of the flooded and devastated area, distributing typhoid vaccines and other vaccines and serums designed to protect our citizenship against any possible contagious diseases that may have been disseminated, without money and without price, and the physicians of the State of Arkansas are to be commended for their majestic patriotism in this hour of our nation's crisis.

So, responding to the honor that has been conferred upon me, I welcome you to the City of Little Rock, the Capital of our rapidly growing commonwealth, a city that in the past fifteen years has increased from a population of 46,000 to a population of 89,000 at the present time, a city of culture and refinement, a city where the hearth-stones are hearth-stones of culture and hearth-stones of refinement. God grant you gentlemen a continued baptism of medical knowledge which is power. Then, like the unseen processes in the coloring of the rose, it will blossom into tints that nothing but the chemistry of the heavens could produce, aided by the Divine allies, the sympathy, knowledge and the love of the American physician. I thank you.

ADDRESS OF WELCOME FOR THE PROFESSION

Anderson Watkins, President Pulaski County Medical Society.

Dr. Watkins: Mr. President and members of the Arkansas Medical Society: A number of years ago I had the privilege of welcoming this Society for the county society. Many who were then with us are not present. That number includes some of our best, some of our ablest men, men of the highest ideals. Inspired by the memories of their deeds and their personalities, we are trying the best way we can to carry on. I remember in those days there were two burning questions which used to occupy the attention of the State Society annually for several years. One was, should we give quinine or should we not give quinine in malarial hemoglobinuria, and the other was, should a case of appendicitis be operated or should it not. The question of the diagnosis, etiology and pathology of malarial hemoglobinuria was not entered into.

We in this county are proud to be members of the Arkansas Medical Society. We who have been members for a number of years can note the marked difference in the point of view, in the real evidence of study on the part of the various members who read their papers annually, and on the fight made by this Society in the interest of public health. This is one profession which seeks to diminish the market for its own works. This is one of the things for which we are justly and, I think, modestly proud. I know at present of no other calling, outside of the ministry—and how well they succeed, I don't know—which is trying to lessen the demand for its own services. But likewise this body of men has as its prime initiative advancement in medical education. I mean, in this State, as applied to this State and as a part of the profession of America, it is constantly pushing for an elevation in standards, in attainments and in ideals of its members and in the raising of the standards of its schools. Not only that, gentlemen, so far as preventive medicine is concerned and the important question of the raising of the standards of its schools, this Society initiated some years ago and had enacted the present law which licenses practitioners to practice in this State under our system of teaching. There is room, of course, for great improvement. We have too many boards, we have too many cults which it will be the duty of the Society to gradually eliminate.

Now, we hope, gentlemen, that our scientific program will interest you and we hope that our entertainment will entertain you. And, last but not least, we desire to extend a welcome to the ladies who have accompanied you and will assure them that our own auxiliary of the County Society

will as usual come to our aid in their entertainment. I sometimes wonder if the ladies' auxiliary will be content to remain an auxiliary, or if, as frequently occurs in private life, they will relegate us to an auxiliary. That sometimes happens. I don't know how you feel, but I see examples here and there of such an achievement.

Gentlemen, we welcome you again. We hope that you will remember us when you leave. We appreciate your visit immensely and to an untold degree, in view of the disasters and the floods and the difficulties under which you came here.

Again, let me extend a most hearty welcome and kindly feeling to the Arkansas Medical Society from the County Society. (Applause).

RESPONSE TO THE ADDRESS OF WELCOME S. J. Wolfermann, Fort Smith

Dr. Wolfermann: Dr. Brough, Dr. Watkins and physicians and citizens of Little Rock: It is my purpose to try to express to you the appreciation of the members of the Arkansas Medical Society for the many invitations, the kind words and courtesies that have just been extended to us. I assume there are quite a few men here older than I am, more experienced in medicine, abler to express this appreciation and for that same reason they have enjoyed the benefits of being in Little Rock often. But I wish to assure you gentlemen from Little Rock that in the fourteen years that I have been attending meetings they have been most beneficial and enjoyable, and Little Rock has been most generous in its hospitality. We try to meet elsewhere, in the four corners of the State, and each time we gladly return to Little Rock. Now at first glance you might think that was because Little Rock is the Capital of the State and centrally located, but those, I believe, are minor factors. Cities gain something from natural resources and something more possibly from natural locations, but these factors do not make successful cities in which to live or in which to visit. The real cities are man-made and we all like to visit man-made cities. The reason I believe this Society prefers meeting in Little Rock is not because it is centrally located, but because the profession of this community have demonstrated not only by its natural qualities, God-given possibly, but by their initiative and constant efforts to produce a superior grade of work, and the contact with and the demonstration here in your midst of scientific medicine is educational and beneficial to all of us.

Now, mixed with this truly professional side, we receive the many kind courtesies of the true gentlemen, both from the physicians and from the laity of this city.

I think, then, that it is only natural that this Society should always want to come to Little Rock, even to the extent, as we have often done, of forcing ourselves upon you.

Now, knowing these things from past experience and realizing fully the courtesies that are necessary to successfully entertain us, the members of this Society deeply appreciate this kind invitation for this reason and I most sincerely emphasize the sentiment. We thank you.

PRESIDENT'S ADDRESS

*The President's address will be found on the first page of reading matter in this issue.

A telegram from the Southern Medical Association was read as follows: "Greetings. Hope you will have a successful and pleasant annual gathering."

GENERAL SESSION

THIRD DAY

Friday, May 13, 1927, 2:30 o'clock, p. m.

The General Session was called to order by the President for the coming year, Dr. Thibault, a quorum being present.

Dr. Lemons: I shall have to leave, and will ask that you excuse me. But I want to thank you most kindly for your attendance and one other thing: This morning it was my privilege to unveil the slab that was set up by the Arkansas Medical Society and I consider that a great honor. Every one of you know Dr. Vinsonhaler, one of our beloved friends. I think just at this time it would be fitting indeed to have a few minutes intermission and allow me to introduce to you the new dean of the Medical Department of the University of Arkansas.

Dr. Vinsonhaler: I hardly recognize myself from the description. A Scotchman was making love to a girl and he was afraid to pop the question, and he approached her in this way: "Doris, have you noticed that I have been seeing you to church for the last three years?" She said, "So, you have, Sandy, so you have." "Doris, have you noticed at the church that I passed you by when I would take up the collection?" "So you have. I have noticed that." "Well, Doris don't you smell a rat?" I believe Dr. Morgan Smith suggested that this be done for the reason that he is afraid I might back out. He wants to put me on record as the dean in order that there shall be no mistake in the future.

Dr. Lemons: He had nothing to do with this.

Dr. Vinsonhaler: I deem this, gentlemen, a great privilege. There is something I hope to do, something with reference to the State and the profession. Everything that I have, everything that I am, I owe to this State. All of my professional life has been lived here and a good many men I see before me I taught in the 30 years that I was identified with the medical school. I came down from St. Louis for the purpose of teaching in the medical school because I considered it a great honor and always did, and it was during the greatest part of my

professional life, I enjoyed the teaching and the contact with the men in the medical school. And it is therefore, with a great deal of pleasure that I go back to it and, as I taught the fathers, so I hope to be able to teach the sons.

The following telegram was read:

Council Bluffs, Ia.

Iowa State Medical Society in its 76th annual session sends felicitations and best wishes to the Arkansas Medical Society for a successful and enjoyable scientific and social meeting.

Dr. Moulton: I move that the secretary be instructed to acknowledge the telegram and wish the Iowa Medical Society success and prosperity. Carried.

Secretary Bathurst: Under new business, I would like to report the attendance at this meeting at twelve o'clock today at 433. The largest attendance we had was at our golden anniversary two years ago when we registered slightly over 500. The attendance of 433 at this particular time is unusually good. In addition to the 433 members and visitors, we have seventy-eight ladies. At this time I would like also to report, to be included in our minutes, the list of honorary members:

J. H. Lenow, Little Rock.

Edward Meck, Little Rock.

G. A. Waddell, Jonesboro.

J. D. Southard, Fort Smith.

Geo. F. Hynes, Fort Smith.

Herbert Moulton, Fort Smith.

P. P. Boggan, Forrest City.

L. D. Horn, Egypt.

H. A. Stroud, Jonesboro.

B. F. Walker, Jonesboro.

Jas. W. Kennedy, Philadelphia, for love and affection.

The following were selected as the names to be presented to the Governor for appointment on the Board of Medical Examiners:

First Congressional District: Thad Cothorn, J. H. McCurry, W. W. Verser.

Fourth Congressional District: W. W. York, C. A. Archer, D. A. Hutchinson.

Fifth Congressional District: Earle H. Hunt, Geo. L. Hardgrave, W. A. Montgomery.

President Thibault: It is usual for the General Session to confirm these nominations. A

motion to confirm these names for the various districts will be in order.

Dr. Mann: I move that they be confirmed. Carried.

President Thibault: The selection of the next meeting place is in order.

Dr. Moore: I am delegated from Union County and El Dorado in the southern part of the State. We had the pleasure of having the Society meet with us about 10 or 12 years ago. Our little city at that time was composed of about 3,500 people. Now we have between 35,000 and 40,000. At that time we had no paved streets, only around the square and one hotel, but through the co-operation of the laity we took care of the visitors without any trouble. At this time we have about twenty-five miles of paved streets, we have a highway leading from our city across the county in four different directions. By the time the next meeting comes around, we shall have a paved highway across Ouachita and Union counties, and also connected with Columbia County. We have several good hotels and ample room for all of the members if they will attend. We shall be glad to have the Society with us next year.

Secretary Bathurst: I would like to supplement that invitation by reading three telegrams.

El Dorado, Ark., May 13, 1927.

As I am a member of the Arkansas Medical Society, duty prevents me from attending the meeting. I want to extend the Arkansas Medical Society an invitation to meet in El Dorado at their next meeting, nineteen twenty-eight.

DR. T. M. MORGAN

City Health Officer.

El Dorado, Ark., May 13, 1927.

The entire citizenship of El Dorado joins me in extending to the Arkansas Medical Association a special invitation to hold your next annual meeting in our city and we hope you can see fit to accept this invitation.

JAKE R. WILSON, Mayor.

El Dorado, Ark., May 13, 1927.

The Chamber of Commerce extends to the Arkansas Medical Society a most cordial invitation to hold its next annual meeting in our city.

P. T. Phillips, President.

Dr. Fletcher: I have authority from the Garland County Society to invite you all to Hot Springs—you are always invited to Hot Springs—but I am not going to exercise that

authority. I will not even invite you to Hot Springs because I think you ought to go to El Dorado.

Secretary Bathurst: I have an invitation from the Little Rock Chamber of Commerce which extends a most cordial invitation to the Arkansas Medical Society to hold its next annual meeting in the city of Little Rock. Another invitation from the Hot Springs Chamber of Commerce. We have only one formal invitation. "Where do we go from here?"

Dr. Cothorn: I move that the next meeting be held in El Dorado. Carried

President Thibault: I believe it will be perfectly proper to put that in the form of a rising vote instead of taking a ballot, inasmuch as there is only one nomination. Carried.

Secretary Bathurst: We trust you have been entertained during your stay in Little Rock and have enjoyed the program. We feel like we have had a splendid session. A resolution will be in order.

Dr. Mann: I make a motion that we thank everybody in Little Rock for the splendid entertainment which they have given us particularly the Pulaski County Medical Society.

Carried.

On motion, the meeting of the Arkansas Medical Society in 52d Annual Session adjourned *sine die*.

MEMORIAL SESSION

Thursday, May 12, 1927—8:00 A. M.

The Memorial Session was called to order at the Capital Hotel by Dr. C. S. Pettus, Chairman of the Committee on Neerology.

Violin Solo—Mr. Thos. N. Marrissey.

Invocation by Rev. L. M. Sipes, Pastor First Baptist Church:

Our Father Who art in Heaven! It is with grateful hearts that we come before Thee this morning for we know Thou art the Great Father of life, the unfailing source of all our blessings. We thank Thee, our Father, for the gifts of life, for raiment, for food and for health. We thank Thee for the blessings of Thy kind Providence, that Thou hast planted in the heart of Nature a remedy for every disease. We thank Thee for these healing ministers of Thine who seek and find and apply those remedies. We thank Thee, our Father, for the healing of body and soul and for the example of the great Physician who walked among men, who went about doing good in the spirit of His Father and our Father.

And now as we stand in the midst of life, over us is cast the shadow of death. Twenty-eight times during the past year has the messenger of Death knocked at the door of this fraternity and called away the spirits of some who are remem-

bered and loved today. Deep calls unto deep; memory stirs, the past lives again, and we pray that as memory revives the past and old wounds are perhaps opened again and souls are made aggrieved, that the hand of the great Physician may be laid upon hearts and upon homes this morning to heal and to comfort as only thou canst comfort.

We pray Thee, our Father, that the good deeds of these men who have left the walks of this life may live in these brothers who remain, that their spirit of service may be magnified in them, that their knowledge may be added to, increased and not lost. We pray that they may have cast over their faults, for we are all guilty, the mantle of charity, knowing that they are in the hands of Him who made them and who alone is their Judge. Bless, we pray Thee, their families and these their brothers. May Thy benediction rest upon these physicians. Father, again we do thank Thee for them. May their great example be Jesus Christ who went about teaching those who were sick, healing not only their bodies, but in his own Divine and mysterious way, pouring into their souls the oil of consolation. Bless us now with that wisdom which comes from above, that we may apply our hearts unto wisdom and may we so live that when our summons comes, we shall not go as the quarry slave at night, scourged to his dungeon, but sustained and soothed by an unflinching trust we may, like one who wraps the drapery of his couch about him, lie down to pleasant dreams.

For we ask it in the name of Him who loved us and died for us, even Jesus. Amen!

Dr. Barlow, of the Committee, in the Chair.

MEMORIAL ADDRESS

By Dr. C. S. PETTUS, Chairman

As Chairman on Neerology, I am taking the liberty to eulogize our deceased members in unity. I feel that it is permissible and in good taste to venerate with impartiality and fidelity the entire roster that registers the names of deceased members. It pleases me to have this opportunity to thus express my love and esteem for those who have fought the battles of life bravely, and were willing to abide by the laws of nature and died without fear.

Our gathering together at this time to pay reverence and respect to the deceased members of the Arkansas State Medical Society, who have died since our last State Medical meeting, is for a different purpose and opposite in spirit to Mark Antony's eulogy over Julius Caesar, especially in his expression that he was there "to bury Caesar, not to praise him."

Some time has passed since the funeral requiem has been sung, the funeral services pronounced and the lifeless bodies of our departed members have been placed beneath the sod, and we come at this time to avail ourselves, at this prearranged meeting, of the privilege to manifest our appreciation, our fondness and respect for them.

The memorial services hold an important place in the yearly program of our State Society. It offers a time and place to pay homage to our departed members and friends. It also impresses us that death is no respecter of persons, but is inevitable. The doctor with his experience at the death bed knows even better than the layman the truth of this sad fact. Each of us have stood watch over our dying patients like Spartans true, fighting the battle for life, realizing at times that death was bringing its reinforcements to an advantage and forcing us to hope against the impossible.

No general on the battle field faces defeat with greater composure than does the doctor at the bedside of death. His grief, disappointment and defeat remain within his soul unspoken. Little does the layman know of the depression, despondency and humbleness of the doctor who loses the battle to the Grim Reaper, after fighting so bravely to save the life of his patient. Our brothers who had so often witnessed the scene of death and met these disappointments were prepared when the call came and were not afraid. They had learned to appreciate, during these sad experiences, the brave words that were uttered by Julius Caesar just before his assassination: "Cowards die many times before their death, the valiant never taste of death but once. Of all the wonders that I yet have heard, it seems most strange that men should fear, seeing that death is a necessary end and will come when it will come."

The Memorial Services impress us that we, too, may find comfort in this thought. This suggests that we in time may have our names placed upon the roster of departed members at such a meeting as this, to which we come to resurrect the virtues and grandeurs of the dead. It impresses us of the value in after life, rewarded to us through right living and performance of duty while yet alive.

The hour intermingles grief, sadness and joy. We are grieved over the loss of a true and tried friend, saddened that our departed member is no longer able to counsel with his family, and that they are deprived of his earthly love and assistance, that our Society has lost valuable members, and that the different communities in which they lived have lost their influence and service; but we rejoice to think of their good deeds and that while alive they were valuable citizens adding much to life, living lives of service, and were worthy mem-

bers of this scientific body. We also rejoice that the sting of death is lessened by the promises of God, through the redeeming blood of Christ.

To decide the hereafter of man is not our prerogative. Our opinion in this matter is as the lisp of the wind. The decree that man live his own life, associating with it his own faith in accepting Christ, through which his religious ideals are developed, is the proclamation made by our Lord through His holy words.

The mystery of life and death are beyond our comprehension. Our confidence in His promise, and our abiding faith, give to us the assurance that satisfies and relieves us of doubts and dogmas, scepticism and uncertainties. This confidence buoys us on to the greater and nobler things of life. When we found our faith in the hereafter in this substantial way, we have a protection in death that we do not have in life. In this we replace doubt with faith, feeling that we have discovered the way to a successful end of life.

The comfort offered by a well-known deceased orator when he said, standing at the grave of a child, that the heathen African woman holding her dead infant in her arms and suffering the grief of death could answer as intelligently the hereafter of her child's soul as the most learned of the world, offers no relief during the suffering hours of grief. We may answer with this statement: That the most learned without faith are no better informed on the question of the hereafter than the heathen; though the uneducated with faith in Jesus can answer satisfactorily the inquiry, and as intelligently as the most learned. A slight transposition of the words of this same orator in eulogy offered at his brother's grave gives to us condolence at this time to say, "Life is a narrow vale between the cold and barren peaks of earthly existence and eternal life. We strive to fathom its mysteries, we cry aloud, to hear only the echo in answer to our wailing cries. While from the voiceless lips of the unreplying dead there comes no word, but standing upon the pyramid of hope, we see a star and listening love through faith can hear the rustle of a wing." Faith offers us consolation when we think of the life after death. To know the Divine gives guidance which knowledge is compatible with science, and it alone relieves confusion that would blur the panorama that lies between the

immaculate birth of Christ and the evolutionary progress of the normal fusing of the spermatozoon and the ovum. The failure to appreciate and understand Divinity deprives us of hope and leaves us in desolation and despair.

We are happy to come here today stimulated with the thought which is guided by the star of Hope, the moonbeams of Faith, and the sunshine of the sweetest promise.

It is not all to live and sad to die. To have lived worth while, leaving our "footprints on the sands of time," gives the earthly glory to have lived.

"He is not dead whose glorious mind
Lifts thine on High,
To live in hearts we leave behind
Is not to die."

This is a sacred and sublime part of our yearly program and at this time the earnestness and sincerity of life is emphasized. The lesson of untiring energy and unselfishness is taught. The sympathies of sorrow linked with love are expressed and shown. In this meeting as in no other our hearts beat in unison. Strife, jealousies, prejudices, dislikes, misunderstandings and resentments are eliminated. At this time we can bow our heads together in submissive reverence and brotherly devotion, and are here reminded that unless we fulfill the demands of duty and honest effort we fail in our life's work.

Among the names upon the roster there are those who were known only in the community in which they lived. Others were well known throughout the State, and perhaps some of national reputation. Now all are equal by the hand of Death and we honor them all alike with our respect and love.

My words of eulogy are intended for each deceased brother with a like consideration. I honor our departed members and speak of their value collectively. I leave it for others to eulogize their friends. I trust a word of approbation and respect will be spoken about each of our departed brothers as their names are called by those who knew them personally.

We sanctify this hour of renewed bereavement. The valor of our deceased brothers we honor and revere as we think of their integrity, and approve their achievements.

Longfellow, in the latter part of his poem, "The Norman Baron," gives us the thought in spirit of this hour when he so musically said:

"In that hour of deep contrition
He beheld, with clearer vision,
Through all outward show and fashion
Justice, the Avenger, rise.
All the pomp of earth had vanished,
Falsehood and deceit were banished,
Reason spake more loud than passion,
And the truth wore no disguise.
Every vassal of his banner,
Every serf born to his manor,
All those wronged and wretched creatures,
By his hand were freed again.
And, as on the sacred missal
He recorded their dismissal
Death relaxed his iron features
And the monk replied, 'Amen!'
Many centuries have been numbered
Since in death the baron slumbered
By the convent's sculptured portal,
Mingling with the common dust.
But the good deed, through the ages
Living in historic pages,
Brighter grows and gleams immortal
Unconsumed by moth or rust."

LIST OF DECEASED MEMBERS

Aley S. Hoover, Stamps, May 31, 1926.

Harry Clay Stinson, Dermott, June 15, 1926.

James B. Roe, Newark, June 17, 1926.

Strodder U. King, Little Rock, June 20, 1926.

Carle Edwin Bentley, Little Rock, June 30, 1926.

John C. Swindle, Walnut Ridge, July 10, 1926.

Samuel L. Brooksher, Yellville, July 12, 1926.

William Horace Bennett, Paris, July 18, 1926.

Thomas M. Rice, Avoca, July 23, 1926.

Albert Ross Simpson, Corning, August 19, 1926.

Leonidas Kirby, Harrison, August 20, 1926.

Louis P. Furbish, Mellwood, October 19, 1926.

Cleveland B. Hollabaugh, Leslie, November 9, 1926.

Roy Rice, North Little Rock, November 18, 1926.

Robert Hardin, Cummins, November 22, 1926.

Hiram L. Throgmorton, Pocahontas, November 30, 1926.

William Harvey Moorhead, Stuttgart, December 2, 1926.

Robert Lee Grant, Texarkana, December 6, 1926.

Robert P. Nall, Armored, December 21, 1926.

Chas. C. Price, Dumas, January 2, 1927.

John M. Osborne, Howell, January 6, 1927.

Lawrence C. Gray, Clarksville, January 21, 1927.

William Murdock McRae, Blytheville, February, 2, 1927.

Edward Franklin Hodges, Branch, February 5, 1927.

Frederick Eugene Harrison, Fordyce, February 17, 1927.

Frank Lucas French, Little Rock, February 28, 1927.

John Foster Bradley, Lamar, March 4, 1927.

Henry Clay Dunavant, Osceola, May 2, 1927.

Dr. Barlow: Dr. Pettus eulogized this great list of deceased members collectively. Your committee thought it wise that each deceased member should be eulogized. Therefore we made diligent effort to secure a friend of every deceased comrade, and after much correspondence we had the promise that a friend for each member would be here today to eulogize his deceased co-worker. You can see that this is a large list of deceased members and owing to the small amount of time allotted us it will be impossible to have an open forum, each being eulogized by a number of friends. We are not unmindful of the fact that many of you would be glad to say something relative to many on this list, but the time will not permit and we hope each one person will respond promptly, as the names are called.

Dr. F. E. Baker: Dr. Hoover came to Arkansas in 1886. He was reared in Maryland, somewhere between Washington and Baltimore. He was a practicing physician in our county, LaFayette, for forty years, a portion of the time at Buchanan and the rest of the time at Stamps. He was found dead on the 31st of last May about three miles from home, in his car. He was a faithful friend to organized medicine, a good citizen, a good doctor, a fine business man, and a faithful, true, Christian.

Dr. Barlow: Dr. Stinson was superintendent of the State asylum for twelve years, and one of the finest men I ever knew, a man loved by everybody in the community in which he lived. I am sorry Dr. Witt is not present to eulogize Dr. Stinson.

Dr. W. B. Lawrence: Dr. Roe was a native of this State. He and I were neighbors. He was a member of the Independence County Medical Society and the Arkansas Medical Society for years; a true friend to organized medicine. He had a home with his family; he loved his home, as good men do. He was a churchman and a Mason and was respected and loved by his neighbors. I knew him for many years and we all loved and respected Dr. Roe.

Dr. W. C. Dunaway: It is my pleasure, as well as a sad duty, to render a service, requested of me by your memorial committee. The subject of this eulogy, the late Dr. Strodder U. King, was born at Marshall, Ill., October, 31, 1852. His wife, who now survives him, was Miss Sue Senter, a native of Humboldt, Tenn. Only one child was born to them, and their lives saddened by its death at an early age. He practiced at Hope, Ark., in 1884. In 1885 he took his degree from the University of Louisville and came back to Hope, engaging in practice until 1890; at which time he moved to Little Rock, where he was continuously engaged until his death this year. He held the rank of 1st Lieutenant during the Spanish-American War, and also a similar rank in the tuberculosis service at Camp Dodge, during the world war. I did not know Dr. King intimately, but perhaps as favorably as any of his colleagues, nearly all of whom have passed beyond. Not more than two doctors are left, who were in practice in Little Rock, when Dr. King came into the field. His efforts were mostly confined to his office, where he dealt largely with chest diseases. He delighted most in this field of practice. So far as I am able to learn he wrote nothing upon medical subjects but read extensively in medicine and general literature. He was modest, rather diffident by nature, but always manifesting a sincere, gentlemanly cordiality. Socially, he was a delightful companion and took pleasure in exchanging stories with his colleagues. He was moderate in his criticism of others. He despised professional combat and intrigue. He always sought a high plane of professional honor during his career. It is

sad to think that so few of his type remain to protest against commercialism.

The Society has lost a worthy member; the community a good citizen; his wife a devoted husband. I'm sure you all join in the sentiment, "we are sad that we shall not see his face again."

Dr. Homer A. Higgins: On the 30th of last June, this Society sustained the loss of a master surgeon in Dr. Carle E. Bentley; the students sustained the loss of a beloved teacher; the State sustained the loss of a valuable citizen and widely-known operator of skill and ability; the poor sustained the loss of a benefactor; and we, his close friends, sustained the loss of a loyal friend, whose memory can never be erased. We were specially benefited by his life, his skill, his kindness and his character. As a master surgeon he was known throughout the country. His success as an operator was unusual. He was raised up by his father, Dr. Edwin Bentley, to be a surgeon and for thirty years or more he was known to most of you as a leader, whose name was familiar to the residents of every village. As a teacher, the students lost a valuable friend. For thirty years he was connected with our medical school as a teacher of surgery. He was ever a friend of the medical student; always their counsellor. He was loved immensely by all his students. As a friend he was unequalled. I became associated with him nearly twenty years ago as a medical student. I knew him probably as no one else did. He was always my friend. That he was loved by all classes of people in all walks of life was evidenced by the mingling of his friends at his death, who gathered about his bier, the rich and poor, the old and young, each recognizing that they had lost a benefactor, a master surgeon, a friend. Dr. Bentley was never known to refuse or fail to give the best that he had to the poor. If any received better attention than others at his hands, it was the poor.

Dr. H. R. McCarroll: Dr. John Sylvester Swindle was born December 2, 1881, near Walnut Ridge, Arkansas. He was reared on the farm and received his early education from the public schools of the county. He then went to the University of Arkansas where he took a junior college course teaching school in the interims between the terms to defray his expenses. After this course at Fayetteville, he entered medical college at the University of Tennessee, where he took his first two

courses. His last two years work was done at the University of Louisville, Ky. He then settled at Walnut Ridge, Ark., where he lived until his death. In 1911 he married Miss Minnie Dowell, daughter of Mr. and Mrs. S. C. Dowell, to which union were born four children, all boys.

He volunteered in the World War and served mostly in a rehabilitation hospital in New York City. He did not return home for some time after the war. He again took up his work where he left off. In 1921, he was elected by the Arkansas Medical Society to a place on the State Examining Board where he remained until his death being elected president of the board in 1925.

Dr. Swindle was a man of outstanding character and stood high in his profession. I am sure that I speak the sentiments of every physician in his county Medical Society and, in fact, of all who knew him, when I say that there was not a more honorable, cleaner, upright man in the profession than he. He enjoyed the confidence of his patrons and had one of the best followings of any man in his county society.

He made a bright profession of religion in 1925 and united with the Baptist Church and was faithful in his religious duties until death called him.

He was an unusually good husband and father and certainly did every thing in his power to establish a happy home. He not only left his influence on his family, but also on every one who knew him. The community has lost a most excellent citizen, the profession a workman that needeth not to be ashamed, the good wife a precious husband, and the children a devoted and loving father.

We hope and trust that the clean life that he lived, and the good example that he set by his faithfulness to duty, will live on in the hearts of all who knew him and that this influence will last to the end of the age.

Dr. W. E. Jones: I had been closely associated with Dr. Bennett for about thirty-seven years, and it is with a feeling of deep reluctance that we give up one of nature's noblemen. He was born in Logan County, raised and practiced medicine there for these thirty-seven years. He never lived anywhere else except at Conway, where he moved a few years ago for the purpose of educating his children in college there. Having a number

of children, he gave them all a good education. To my way of thinking, one of the greatest blessings to humanity is the general practitioner, the man who is a specialist in every branch of work known to the profession and Dr. Bennett was such a general practitioner. He was very loyal to the profession, a dignified gentleman, of the highest type of honor known to man. When I think of him and of his untiring efforts, and of Dr. Bentley, whom I knew quite as well as Dr. Higgins, it makes me think of how many friends that man has made, that I know of. He gave of his time for the benefit of the poor, where he knew there would not be a penny of compensation. On many occasions, he spent the entire night with a patient when he knew there was to be no fee. When we think of the untiring efforts we all have to make for those that we serve, and knowing that we have had that type of men and must lose them as we all shall some day, it makes us feel sad in a way. I want to say that it is with a feeling of great pleasure that I am able to remember Dr. Bennett as one of my friends.

Dr. J. H. Lindsey: Dr. Rice was a true man as well as doctor. He thought more of his patients' welfare than he did of his own. He was brave enough to say, he did not know when that was the honest thing to do.

Dr. F. Vinsonhaler: One year ago at the meeting of the Arkansas Medical Society in Hot Springs, I had the pleasure of taking breakfast with Dr. Kirby. That was merely an incident in an uninterrupted and unbroken friendship of more than thirty years. At that time I was impressed with the fact of how bright and alert the doctor was, notwithstanding his advanced years. His mind was just as keen and just as receptive as it ever was. We spoke of our old friends and old times in the Society. He visited me once afterwards in the office and I found him but little changed so that when the news of his death came it was something of a shock to know that I wouldn't again meet him as I had been doing all these years in the Society meetings. When we speak of Dr. Kirby, our minds revert instantly to a distinctive type of practitioner. He was to my mind the most alert, the most active, the most progressive of the general practitioners, you might say, in the State. I had the pleasure of talking with his wife afterwards and I asked her if, during all his busy professional life of fifty-five years in active service, Dr.

Kirby had ever faltered or had ever changed or whether his interest in medicine had ever lagged; and she told me only once, and that was when there came into his heart that in place of being a practitioner he might be a minister of the Gospel, and he once thought seriously of giving up the practice of medicine and becoming a minister of the Gospel. But that didn't last very long, because he was brought to realize how much more he could accomplish as a physician. Dr. Kirby was born in Dade County, Mo. He came to Harrison about 1871 as a druggist and drifted gradually into the practice of medicine. He graduated at the St. Louis Medical College in 1876 and was a protege of John T. Hodgins, that outstanding figure in the medical and surgical life of St. Louis. If I were called upon to say who influenced his life perhaps more than any other man, I would say it was John T. Hodgins, and that he never escaped from that influence, luckily for him. Now, there may be some among you who can remember the old type of practitioner as I knew him when I was a boy. I can remember him as he came into the room, and when he took his black saddle bags and put them on the table, examined the patient, looked at his tongue, took his pulse and temperature and asked questions of the family. Then he unfastened those wonderful old black saddle bags, which seemed to me to contain all the possible evils there could be; he took out his old spatula, called for a piece of newspaper and cut out a number of powder papers which he arranged in a row on the table. And then there came the quinine bottle and out of that there were papers that he arranged one after the other with the ingredients that we didn't exactly know; but we knew the awful and lasting taste, for in those days, there were no capsules and quinine had to be taken with slippery elm bark mucilage. Those were the conditions under which Dr. Kirby began the practice of medicine. In fifty-five years of practice he saw the wondrous changes that took place. In those days, he practiced without the help that so many of the modern physicians have, the laboratory, the x-ray, the microscope, etc. And out of those difficulties there arose a man in those days who was the best exemplification of the art of medicine that we can realize, because he learned above all things to be self-reliant. He couldn't go to any one else. Now, to illustrate; the doctor was going down the street

of his home town; he was met by a crowd of excited people rushing with a child in the arms of the father. Seeing that there was a foreign body in the child's wind-pipe, and the child practically dead, the doctor took out his pocket knife, put the child's head across his knee, did a tracheotomy, out came the foreign body and the child lived. I don't think that anything could illustrate the resourcefulness and the courage of the man better than that one fact. The one great sorrow of his life was the loss of his son. Those of you who have reached advancing years and for whom the shadows have begun to lengthen a little, know what a sustaining thing it is to have the love and affection of a son. I don't think that wound ever healed and yet in our last conversation there was practically nothing that the doctor had to say and yet I knew that it was with him all the time. I often think of a life so active, so useful and so beneficial as that one was, and now it reminds me of Dr. Osler when he came at the last moment to express himself when he knew that the time had come for him, when he said, "Mine has been a happy life. I have had hosts of friends and they have been good to me." And he lost his only son on the battle field, a boy with ideals. The boy was fond of fishing, and his father nick-named him "Isaac Walton," and he always spoke of him lovingly as Isaac. When he realized, of course, that Isaac would never come back from the battle field, and he spoke of him at the last moment, he said, "Wouldn't it be nice if on the other side I should meet Isaac again?" And I think that was always in Dr. Kirby's mind. So we say lovingly "good-bye" to our old friend; nothing now but a memory, a green mound and a marble shaft. Good night, my friend, good night, good night.

Dr. Henry Thibault: Dr. Rice was for two years a member of the Leno County Medical Society. His life should be to a certain extent an example and in another sense it should be taken as a warning by the younger practitioners. Dr. Rice was a victim of his own energy. He was one of those who held it as a part of his religion to answer every call at the time he got it and he was imposed on by the people of the country where he practiced until he sacrificed his own life, at a time when he should have been enjoying it to the fullest extent. He was going all the time. He was one of those men that hardly knew the mean-

ing of the word "rest." He asked no questions about his patient's ability to pay. He asked no question about his intention to pay. He simply made his call. He made too many calls. The consequences were that there is always a certain number of people in every community that are willing to take advantage of our peculiarities, of our susceptibilities. I don't think Dr. Rice ever stopped long enough to think about being a business man. Consequently he had more long calls to make than any doctor practicing in Leno County at the time he was there, because some of his patients moving away to other neighborhoods took advantage of the fact that he was a general practitioner. And he made more calls. During the last years of his life, his health began failing rapidly but, as far as I know, he never let up, but continued to promptly answer calls. The last time I was at his house, his noonday meal was interrupted about four times by the telephone; by the time he had half finished his meal, he was up and to the office to meet somebody. I have known him very often to make visits of ten or fifteen miles at night, when he needed medical attention a good deal worse than the patients he went to see. That is not unusual in the country where people haven't been trained to the fact that the doctor needs a little physical rest and relaxation once in a while. It used to be a habit with most of them to put off until night to send for the doctor because it didn't interrupt the day's work; it was easier. The negroes had a way of holding church meetings in August and September and those meetings began about ten o'clock and broke up about two, so that the habit was that they would generally make for the doctor's office on the way home from church and left word that they would like for him to see their little girl. Some of us who are a good deal more hard-hearted, and not as anxious to get the call over and done with as Dr. Rice, had tried to educate these people to the fact that we weren't good doctors after 2:00 a. m. as we were at 11:00 a. m., that we can do better work in the day time, when we can see, that we can't see in a dark cabin with a lamp without any chimney on it, that it is a good deal cheaper for the patient, provided he is going to pay his bill, to bring the child to the office when he first gets sick, than to have the doctor ride fifteen or twenty miles at night to see him. These things didn't bother Dr. Rice. He made calls when they

came to him, made them promptly, and he was an example of energy that stamped the old practitioner. He was a victim of that energy. We have that type of physician, who doesn't stop to think about himself. It gets to be second nature with him. If a patient calls for help, he gets up and goes. Dr. Rice is a good example for the young practitioner. He was imposed on and used by the people of the country to avoid the financial responsibility of getting another doctor. He did an immense practice with a very small financial return and in the end he lost his life by neglecting himself, very often to the benefit of people that didn't deserve it.

Dr. G. A. Warren: I was not able to get any data on Dr. Throgmorton because his wife failed to answer my letter. I had been closely associated with Dr. Throgmorton for the last twenty-five years or more, as closely as physicians can be who live in separate counties, fifteen or sixteen miles away. It was my privilege and pleasure to serve as counselor for the first counselor district, appointed by Dr. Vinsonhaler when he was president of the Arkansas Medical Society and I can say that I never attended or had any knowledge of any medical society being held in Randolph County that Dr. Throgmorton was not present. He was a man of seemingly great endurance and energy, a little of the type of Dr. Rice, that Dr. Thibault mentioned. He thought of himself last.

An incident occurred that I might mention. He had a lipoma on the back of his neck that Dr. Runyan and Dr. Shinault, who were then associated here together, took care of. He asked me to go around to the office, that he was going to have it taken off. He sat down, stooped his head over, and I watched them whittle on him for fifteen or twenty minutes, and he never grunted. It was an act of stoicism, heroism, endurance, and it was typical of the man, that he did not complain of hardships or of any task that was put on him. He did his part. He was ethical, honest and agreeable to his brother practitioners. What heritage he left, I don't know, but he left the heritage of being a true physician, a man upon whose word you could rely and one who could be an example to the coming men of his community. I might say here without exaggeration that he was the foremost physician in Randolph County. I don't think I am casting any reflection on any of his colleagues

when I say that. Most of our medical society attended his funeral at Poteahontas. I could not attend because I was otherwise engaged.

I want to say just here a word by way of digression with reference to my friend, Dr. Leonidas Kirby. I was very much interested in Dr. Vinsonhaler's remarks. But no man has ever been a closer friend to me or closer associated with me, to live in different parts of the State, than Dr. Kirby. He died on the 20th day of August and his family, knowing of our relationship, wired me that he was dead and the day of his funeral. While, of course, it is a calamity for our friends to die and have to attend the funerals, it would have been indeed a pleasure to render him homage had I not been in one of those unfortunate situations which prevented my attending. I was a witness in a murder trial and the trial was set for the day his remains were interred, and I could not get away.

However, Dr. Vinsonhaler didn't tell you that in his family he had three sons who are physicians, one of whom is dead, and the other two are following in their father's foot-steps, and while they may follow in the foot-steps of their father, they can never surpass that grand and good man, Dr. Leonidas Kirby. And it is my hope before I shall have had the committee on necrology recount my life before this Society that I shall visit that cemetery and drop a flower and perchance a tear upon the grave of my beloved friend, Dr. Kirby.

Dr. M. C. John: I appreciate the opportunity to speak individually of my friend and neighbor Dr. William H. Moorhead, who died December 2, 1926, at the age of 62; having practiced medicine 41 years, after graduating from the University of Maryland.

In the limited time allotted, I cannot give much of the details of the life of Dr. Moorhead. His was such a life that with but a single sentence to express it, I would say he was a man of the truest integrity, the purest manhood. I will add more than that, he was a Christian gentleman.

His fund of information was valuable to his associates, his ideals were inspiring, and his straightforwardness gave proof that honesty is the greatest jewel that a man can possess.

He never dodged an issue, but weighed it carefully and took his stand openly.

Like many others of our citizenship, he came from another State, a native of Pennsylvania,

but when he adopted the State of Arkansas he gave himself up to the new surroundings and from the first was one of us.

He was a first lieutenant in the Spanish-American War and served on the Medical Advisory Board during the World War. He was a charter member of the Arkansas County Medical Society and in its files are many valuable papers he has read. The fatherly counsel he has given us will be greatly missed by the entire Society.

His modesty was marked and to break this barrier and be allowed an approach to his true self was a blessing. The grandeur of his character was left to a chosen few to recognize and in that I was thus fortunate. I rejoice in being able to bring to you today the assurance that a greater and nobler man never lived.

While it grieves me to acknowledge his death it pleases me to tell you that his great life was so impressive to me that I feel honored in being asked to eulogize him at this meeting and to be given the opportunity to tell briefly of his virtues and to be known among my professional and other acquaintances as a friend to this grand and good man.

Dr. R. H. T. Mann: Dr. Grant moved to Texarkana from Kentucky in 1891 and practiced medicine continuously there until the date of his death. I knew him intimately during the last years of his life, especially the last three or four years. Dr. Grant's health began to get bad and he and I played golf together. I found out that he was a real prince. Dr. Grant was a hero in the last years of his life because he knew his end was not far off and yet with all that he went on and met his fate without a falter or complaint. A braver man I have never known. I want to say that I didn't have a better friend than Dr. Grant.

Dr. Thad Cothorn: Dr. Nall was perhaps the best beloved physician of Mississippi County. Unfortunately it was not his privilege to attend many sessions of our State Society, but in Northeast Arkansas he was one of the best workers we had. It was my pleasure as councilor of that district to visit the Mississippi County Medical Society at its December meeting at which the officers were elected for the present year. Dr. Nall was president in 1926, and he was re-elected president in 1927, and, you might say, he died in the harness. Dr. Nall was afflicted with car-

cinoma of the stomach and his end was expected daily. He died a week and a half after that session of the county society. Many who perhaps didn't know Dr. Nall well would consider him in the light of a very rough type of man, but he was a man of deep religious nature, though he affiliated with no church. It was my pleasure to take a post-graduate course with Dr. Nall twice and at the last meeting of the Southern Medical Association at New Orleans, he was there, and we were together quite a good deal. At that time he had a little poem in his pocket and he handed it to me to read. I thought so much of it that I copied it and have made use of it several times, and he took quite a good deal of consolation from this little poem that he gave me and in our troublous times and prevailing conditions in this State it has a personal appeal to all of us and I would like to read it with your permission.

FRET NOT THYSELF

Fret not thyself, O troubled soul,

Because some men of guile succeed,
Nor envy those who gain control

By cringing wile and crafty deed;
They shall be cut down like the grass,
And as the stubble they shall pass.

Trust thou the promise of the Lord,
Nor in his righteous service tire;
He will not fail to keep His word,
He shall give thee thy heart's desire;
Commit thy ways unto His will
And he shall all thy dreams fulfil.

God is the final judge of men,
And He shall bring the truth to light;
Go thou thy way in patience, then,
And still be true to what is right;
The Lord shall yet thy worth proclaim
And put thine enemies to shame.

Fret not, O tired and troubled soul,
Nor envy men of craft and guile;
Hold thou thine anger in control,
They flourish but a little while;
Yea, thou shalt look for them in vain—
The righteous only shall remain.

Dr. A. Isom: When called upon under ordinary conditions to pay tribute to our departed comrades, words seem to evade the speaker and where the relations were as close and intimate as existed between myself and Dr. Priece, the task is doubly hard and I find myself unable to select words that will adequately express the tender sentiments I cherish for his memory.

Having been for many years closely and intimately associated with him both professionally and socially, I perhaps was in position to know him much better than those not so intimately associated with him.

Born in Virginia August 16, 1872, a son of one of the best families of that grand old commonwealth, he came to us in the year of 1900 and throughout his residence among us so lived that his life reflected honor in the highest degree to his parents and the State that gave him birth.

A graduate in both Civil Engineering and in the profession he so signally honored, he came to us admirably equipped for just such service as he later rendered to the people of the State he adopted as his permanent home.

As a physician, he was capable, conscientious, kind and true, living and practicing according to the highest ethics of the profession, and now that he has gone, it is comforting to know that not a single blot mars or tarnishes his professional career.

Dr. Priece was by his patrons considered not only the family physician, but the close friend and kindly adviser in those dark foreboding hours when the rays of God's sunlight seemingly refuse to penetrate the sick room.

As a friend, and speaking as one who really knew him as such, I am reminded of the beautiful story of Damon and Pythias, his life being a true and striking exemplification of the principles that immortalized that wonderful story.

Dr. Priece did not confine his activities to his profession alone, but gave wholeheartedly of his time and wonderful talents to every institution or movement that had for its object the progress and development of his community, county and State. His love for men and his interest in their well-being was excelled only by his attachment and devotion to children, and, in my humble judgment, this generation will pass away, before the memory of his services in behalf of the schools can be forgotten.

If success were to be measured, as is often erroneously done, according to the accumulation of worldly possessions, then our friend and co-worker was a failure; but when measured by that divine method, the yardstick of service, then we can truthfully say that his life was abundantly successful and full of glory.

In the untimely death of our friend and co-worker we have lost a member, whose memory we cherish and whose life we may well emulate; the State and community a citizen whose place will be difficult to fill; the home a devoted husband, and a kind and indulgent father.

That he has gone we deeply regret, our limited vocabulary refusing to furnish words adequate to express the sentiments of our hearts; but even in this hour, we are not as those who have no hope, for while he cared little for creeds and dogmas, his faith in the final triumph of life over death was firm and unshakable, and when the plans of the great Architect of the Universe have been consummated and the workmen are called from labor to refreshment, may we not hope and expect that our friend shall hear from the lips of Him who holds and wields the gavel, the welcome words, "Well done good and faithful servant thou hast been faithful over a few things I will make thee ruler of many things, enter thou into the joy of thy Lord."

Dr. Fenton Husbands: Dr. William Murdoek McRae was born December 31, 1877, at De Kalb, Kemper County, Mississippi and died February 2, 1927, at his home in Blytheville, Mississippi County, Arkansas.

He was reared at De Kalb and later studied medicine at Vanderbilt University and University of Tennessee at Memphis.

Dr. McRae practiced his profession in his home county at Kemper, Miss., until he moved to Blytheville in 1922, where he established a large and lucrative practice; he frequently took post-graduate work. He belonged to his county and State medical societies and was willing and ready at all times to stand by organized medicine.

Dr. McRae was an affable and likeable man who always lived up to the dictum, "He profits best who serves most."

Dr. Thos. Douglass: I am glad to make this tribute to the memory of my friend, Dr. Hodges of Branch. He died February 5th in Fort Smith after an automobile accident. He

was crossing the street and was struck by a car and died soon after reaching the hospital. His death was a great shock to his community and to all the members of our Society. He was a good speaker, he wrote good medical papers; he was an earnest, faithful practitioner of medicine in the county. He did his duty well. Poor health interfered somewhat with his professional activities, but he was a good friend, an honest man, a good citizen. He lived his life well and it was sad indeed for his community and for our Society that his activities were interfered with in the midst of his usefulness. He took a great interest in the oil business, among other things, and actively engaged in that business, but his best and highest interest was in the practice of medicine and he served his people well and faithfully.

Dr. C. J. March: Dr. Frederick Eugene Harrison was born December 24, 1871, in Cleveland County, Arkansas. He died at his home in Fordyce, Arkansas, February 17, 1927.

He was educated in the public schools and private schools at Pine Bluff and Fordyce. He chose medical practice for his life work, and graduated from Kentucky School of Medicine in 1894.

He first located for practice at Mt. Holly, Union County, Arkansas, where he remained until 1899, when he removed to Fordyce, where he resided until his death. He was twice married and is survived by his second wife and a son and daughter by his first marriage.

I was closely associated with him both in private and professional life during the whole time of his residence at Fordyce. He was an able, energetic, conscientious physician, always alert in the performance of his duties. He did a general practice, but also did special work in eye, ear, nose and throat diseases, especially during his latter years. He was progressive and kept up with the advances in professional knowledge.

During the World War he entered the Medical Corps of the army and was granted the rank of Captain. He was in training at Camp Greenleaf when the Armistice was signed. In civil life he was interested and active in all work for the advancement of the community. He was for several years an active and efficient member of the Fordyce School Board. He was a member and faithful attendant of the

Methodist Church. In short, he was a loving husband, a wise and affectionate father and a Christian gentleman.

Dr. J. P. Runyan: F. L. French, the man. Devoted husband and father. 33 degree Mason. Teacher. Anatomist. Family Physician (Essentially). Friend.

It was my privilege to know Dr. French quite intimately. To know him was to love him. He married rather late in life and was a most devoted husband and father. Having married late gave him an opportunity to devote quite some time to an institution of which he was very fond. I allude to Masonry. How he was regarded by his fellow Masons most of you are aware of; those of you who did not know, it might be sufficient to say he was a 33 degree Mason. In Masonry that means honor. He was for a long time active in the putting on of the ritual, and, I understand, was quite versatile, and able to take almost any part of the work at a moment's notice.

He delighted in his profession and was ever ready to answer for duty at the call of his brethren of the profession. When he was needed as a teacher he gave of his time freely to that end. He was a first-class anatomist. His devotion to the art of teaching is responsible for the success of many who have practiced medicine and surgery and are now practicing throughout the State of Arkansas. It was he who gave them their foundation in medicine and presented it in such a pleasant manner as to make them like it.

Dr. French was essentially a *Family Physician*. When he died literally thousands of families went into mourning. He was active in his profession almost up to the hour of his death. Between his devotion to his family and devotion to his profession almost every hour of the latter years of his life was taken up. He took no vacations. He did not play. He answered every beck and call of the families who, in sickness, relied upon him, next to their God.

I am proud to have been able to count Dr. F. L. French among my friends. In his death his family has sustained the loss of a most devoted husband and father, and our profession a most worthy and distinguished fellow.

Dr. Earle Hunt: Dr. Bradley was the type of the old family physician. He was loyal to the medical profession, loyal to his family

and to his friends. He practiced and believed in legalized, ethical medicine all of the time that he was in the practice. Like so many family physicians, he gave more of his time than was really necessary, staying out at nights and wasting his own life by sacrificing for his patients. He was true to all his friends and loyal to the medical profession.

Dr. Anderson Watkins: Dr. Dunavant died on May 2, terminating a long career of usefulness, both professionally and socially. He was a brave soldier in the army, was a member of this Society, of the American Medical Association, was one of the charter members of the Tri-State Medical Society of which he was at one time president. He was in the Legislature of this State and was instrumental in securing appropriations and in initiating the construction of the State asylum here. These are certain outstanding facts of accomplishment in the life of Dr. Dunavant. Most of his career was spent in Osceola. When I was a student here, Dr. Dunavant practiced in this city for a comparatively brief time and went back to Osceola. I recall his appearance; tall and impressive and to me rather stern of countenance. He was a man who was not only able, but he had a very keen sense of right and wrong. The loss to his community and to this State is perhaps unappreciated by the members generally, but by the older generation it is keenly felt.

Song: "God Be With You Till We Meet Again."

GOD BE WITH YOU

God be with you till we meet again!
By His counsels guide, uphold you,
With His sheep securely fold you;
God be with you till we meet again!

CHORUS

Till we meet! . . . till we meet!
Till we meet at Jesus' feet;
Till we meet! . . . till we meet!
God be with you till we meet again!

God be with you till we meet again!
'Neath His wings securely hide you,
Daily manna still provide you;
God be with you till we meet again!

God be with you till we meet again!
When life's perils thick confound you,
Put His loving arms around you;

God be with you till we meet again!

God be with you till we meet again!
Keep love's banner floating o'er you,
Smite death's threatening wave before you;
God be with you till we meet again!

Benediction—By Rev. Sipes.

Personal and News Items

Dr. Vinsonhaler has assumed his duties as dean of the School of Medicine of the University of Arkansas in the offices at the War Memorial Building.

Dr. Morgan Smith, in whose honor a testimonial dinner was given recently by the faculty and board of trustees, will leave Little Rock in a few days for the East, where he will visit Eastern Clinics before taking up his duties as professor of diseases of children and preventive medicine.

Governor Martineau announces the following appointments of interest to the medical profession. Included in the list to the honorary commissioner on the State Hospital for Nervous Diseases, he names Dr. Robt. Caldwell and Dr. Robt. P. Harris of Little Rock. Training School for Girls: Dr. R. A. Law, Little Rock. To fill the vacancies on the Medical Examining Board of the Arkansas Medical Society: Dr. W. W. Verser, Harrisburg; Dr. W. W. York, Ashdown and Dr. W. A. Montgomery, Atkins.

WANTED—Salaried appointments for Class A physicians in all branches of the medical profession. Let us put you in touch with the best man for your opening. Our nation-wide connections enable us to give superior service. Aznoe's National Physicians' Exchange, 30 North Michigan, Chicago. Established 1896. Member the Chicago Association of Commerce.—(Adv).

Dr. R. C. Dorr of Batesville is spending some time at the Mayo Clinic, where he is taking some special work.

Dr. M. S. Craig of Batesville spent the month of May in St. Louis, attending the Clinics, where he took special work on the nose and throat.

A campaign for \$1,500,000.00 for a new medical building at Jefferson Medical College was conducted, June 6-17. The proposed building is to match the new sixteen story Jefferson Hospital, opened in 1924, with which it will be connected. It will be twelve stories high, the first six floors being equipped for medical school purposes, and the remaining floors being left unfinished for future extension of the college or for conversion into hospital facilities for persons of moderate means. The trustees' plan for a greater Jefferson calls for an ultimate expenditure of more than \$2,000,000.00. There are opportunities for gifts in memory of loved ones or to perpetuate a family name by giving a laboratory, classroom or other facilities.

ANNUAL MEETING, BAPTIST STATE HOSPITAL, LITTLE ROCK

On June 23, 1927, at the Baptist State Hospital, at a banquet in honor of H. B. Chrisp, recently elected superintendent of the institution, Dr. Anderson Watkins was elected Chief of Staff by the Pulaski County Medical Society, and Dr. J. H. Sanderlin was elected secretary of the staff.

The banquet, at which the members of the Pulaski County Medical Society were guests, marked the beginning of a new policy in the management of the hospital, Mr. Chrisp announced. In outlining the policy contemplated he said that he intended to follow as closely as possible the method found so successful by the Baptist Hospital in Memphis. The policy in that institution, he said, is one of fairness to every recognized practicing physician. Mr. Chrisp said that partiality and unfairness in the assignment of cases for medical conferences would not be tolerated. Mr. Chrisp

succeeds Dr. J. P. Runyan, resigned.

138 physicians of Little Rock were invited to become members of the staff by the Board of Directors.

164,002 PHYSICIANS IN NEW AMERICAN MEDICAL DIRECTORY

For more than twenty years the American Medical Association has been publishing a directory of the medical profession. Ten editions have appeared, the last one (1927) being just off the press.

The first edition (1906) contained 128,171 names of physicians in the United States, its dependencies and Canada. The new tenth edition includes 164,002 names. There is an increase of 2,644 over the previous edition. If the Directory were merely a list of names and addresses of physicians it would not have great significance. That information is valuable, but of far greater value is the fact that the Directory gives proof of the right of each physician listed to practice medicine; namely, time and place of graduation and year of license. In addition, society membership, specialty and office hours are included. Capital letters indicate those who are members of their county medical society, and a special symbol follows the names of those who are Fellows of the American Medical Association.

The information concerning hospitals and sanitariums of the United States is another valuable and extensive feature. Descriptive data appears following the names of 7,816 hospitals and sanitariums such as type of patients handled, capacity, and name of superintendent or director.

The list of physicians in each State is preceded by a digest of the laws governing medical practice in that State, members of licensing board; State Board of Health; names of city, county and district health officers; officers of constituent State associations and component county and district medical societies. The book, in short, is one vast source of reliable data concerning the personnel of the medical profession and the institutions and activities closely related to it. It contains 2,575 pages and is sold for \$15.00. Published by the American Medical Association, 535 North Dearborn Street, Chicago.

INTER-STATE POST-GRADUATE MEDICAL ASSEMBLY

KANSAS CITY ANNUAL FALL CLINICAL CONFERENCE

and the

INTER-STATE POST GRADUATE MEDICAL ASSOCIATION

Kansas City, October 17-21, 1927

New Shrine Temple, Eleventh and Central Streets

PRE-ASSEMBLY HOSPITAL CLINICS

Friday and Saturday, October 14 and 15

INTER-STATE POST GRADUATE ASSEMBLY
Monday to Friday, October 17-21 (inclusive)

SCIENTIFIC PROGRAM

Pre-Assembly Clinics at the hospitals of Greater Kansas City upon Friday and Saturday mornings, October 14 and 15. Scientific Programs and ambulatory clinics each afternoon at Muehlebach Hotel. Dr. J. Shelton Horsley of Richmond, Virginia, is a special guest upon Saturday afternoon, October 15; Subject: "Peptic Uleer"—illustrated.

The intensive program of the Inter-State Assembly will begin Monday, October 17, at 7:00 A. M. and continue morning, afternoon and evening, until the banquet in honor of the distinguished guests upon Friday evening, October 21.

The guests from Europe are as follows:

Sir John Bland Sutton, England, Surgery; Dr. R. P. Ranken Lyle, England, Obstetrics-Gynecology; Dr. Ersilio Ferroni, Italy, Obstetrics-Gynecology; Prof. Adolphe Maffei, Belgium, Pediatrics; Mr. Garnett Wright, F. R. C. S., England, Pathology; Dr. I. Snapper, Holland, Pathology; Dr. Gustav Alexander, Austria, Otology; Dr. Otto J. Kaufman, England, Neurology; Dr. Giuseppe Franchini, Italy; Dr. Sigmund Frankel, Austria, Obstetrics-Gynecology; Mr. John S. McArdle, F. R. C. S., Ireland; Prof. Carl Bohr, Germany, Surgery; Dr. Luigi Margiagalli, Italy, Obstetrics-Gynecology; Dr. J. Marinho, Brazil; Dr. Fritz Steinmann, Switzerland; Dr. Paul Unna, Germany.

The distinguished guests from America include the following surgeons:

Dr. Charles H. Mayo, Rochester, Minn.; Dr. George W. Crile, Cleveland; Dr. Alfred W. Adson, Rochester; Dr. Arthur Dean Bevan, Chicago; Dr. Jos. Colt Bloodgood, Baltimore; Dr. Hugh Cabot, Ann Arbor, Mich.; Dr. Walter E. Dandy, Baltimore; Dr. John B. Deaver, Philadelphia; Dr. John F. Erdmann, New York; Dr. E. Starr Judd, Rochester; Dr. Francis E. Lahey, Boston; Dr. Dean Lewis, Baltimore; Dr. Chas. H. Frazier, Philadelphia; Dr. Wm. D. Haggard, Nashville; Dr. W. E. Lower, Cleveland; Dr. Robt. C. Coffey, Portland, Ore.; Dr. Jabez N. Jackson, Kansas City, Mo.; Dr. George J. Heuer, Cincinnati; Dr. LeRoy Long, Oklahoma City; Dr. John J. Moorhead, New York; Dr. Allen Graham, Cleveland.

The following distinguished internists are to hold clinics or give addresses:

Dr. Lewellys F. Barker, Baltimore; Dr. Charles A. Elliott, Chicago; Dr. Elliott P. Joslin, Boston; Dr. Frederick J. Kaltefleiter, Philadelphia; Dr. James H. Means, Boston; Dr. Leonard G. Rowntree, Rochester, Minn.; Dr. Clarence M. Grigsby, Dallas, Texas; Dr. Francis M. Pottenger, Monrovia, Calif.; Dr. Frank Smithies, Chicago; Dr. David Riesman, Philadelphia; Dr. John Phillips, Cleveland; Dr. R. S. Dinsmore, Cleveland.

The specialties are represented by the following distinguished physicians:

Dr. James M. Martin, Dallas, Texas (Roentgenology); Dr. Alfred S. Warthin, Ann Arbor, Mich. (Pathology); Dr. Gabriel Tucker, Philadelphia (ALR); Dr. Frank C. Mann, Rochester, Minn. (Clinical Pathology); Dr. Irvin Abell, Louisville, Ky. (Obst.-Gyn.); Dr. Nathaniel Allison, Boston (Orthopedic Surgery); Dr. Alan Brown, Toronto, Canada (Pediatrics); Dr. Fielding C. Lewis, Philadelphia (ALR); Dr. Wm. McKim Marriott, St. Louis (Pediatrics); Dr. Fritz B. Talbot, Boston (Pediatrics); Dr. Wm. B. Hendry, Toronto, Canada (Obst.-Gyn.); Dr. Edward A. Strecker, Philadelphia (Neurology-Psychiatry); Dr. Charles Herbert Best, Toronto, Canada.

Obituary

MORPHEW, LEANDER H.—Dr. L. H. Morpew of Stuttgart, died June 16, 1927, after a year's illness. Aged 69. He had lived in Stuttgart since 1885. He had always been active in civic affairs, having been a member of the City Council for years, and served one term as mayor. He was President of the School Board and a member of all Masonic orders. Surviving are his wife, a son, Howard, and a daughter, Mrs. C. G. Rogers, both of Stuttgart.

WILLIAMS, HENRY E.—Dr. H. E. Williams of Pine Bluff, died June 23, 1927. Aged 73. (See page 27, this issue.)

County Societies

LONOKE COUNTY

The Lonoke County Medical Society met at Kerr, Wednesday evening, June 8th. A sumptuous dinner was served the society by Dr. J. F. Brewer, at his home, after which they adjourned to the school house for their business session.

Present: Cunnning, Benton, F. A. Corn, Sr., F. A. Corn, Jr. of Lonoke; Bowers, Wells and Crowger of Scott; Smith and Davenport of Keo; Watson, Beaty and Ward of England; Harris of Coy; Callahan of Carlisle, and Brewer of Kerr. Visiting doctors were: Dewell Gann, Jr., and T. M. Fly of Little Rock.

The scientific program for the meeting was, "Gastric and Duodenal Ulcers," with a discussion by the Society. This was one of the most interesting meetings in the history of the organization.

The next meeting will be held July 13, at Lonoke, with Dr. F. A. Corn, Sr. A chicken dinner will be served and visiting doctors of Little Rock will be present for the occasion.

Book Reviews

The Surgical Clinics of North America—(Issued serially, one number every other month.) Volume VI, Number II (San Francisco Number—April,

1926). 250 pages with 73 illustrations. Per clinic year (February, 1926 to December, 1926.) Published by W. B. Saunders Company, Philadelphia. Paper, \$12.00; Cloth, \$16.00 net.

Twenty clinics from the San Francisco hospitals constitute this issue of "The Surgical Clinics of North America."

Of unusual importance is the clinic of Dr. McNaught, Stanford University Hospital, regarding ethmoid infections. This subject is gradually being recognized as a source of many local and systemic disturbances. Seven case reports are shown in this article.

Facts on the Heart—By Richard C. Cabot, M. D. Professor of Medicine and Social Ethics, Harvard University. Octavo of 781 pages with 163 illustrations. Published by W. B. Saunders Company, Philadelphia, 1926. Cloth, \$7.50 net.

This splendid but unusual book differs from all those previously written on heart disease in basing its conclusions wholly on the study of cases which came in the end to necropsy.

A summary of the illustrative cases given at the end of each section is most interesting and helpful.

Modern Clinical Syphilology—By John H. Stokes, M. D., Professor of Dermatology and Syphilology in the School of Medicine, University of Pennsylvania; Professor in the Graduate School of Medicine, University of Pennsylvania. Octavo of 1,444 pages with 885 illustrations and text figures and more than 200 detailed case histories. Published by W. B. Saunders Company, Philadelphia, 1926. Cloth, \$12.00 net.

This splendid text-book gives a complete digest of the subject of syphilis. The manner in which the case histories are presented provides a most interesting "dry clinic." It is monographic because only in this way does it seem possible to impart into it a measure of the unity and cohesiveness which teaching and practice in this field seem to need.

FOR SALE

Tice's Practice\$75.00
Ophthalmoscope 12.50
Allison Surgical Table 40.00

Address XYZ, care Journal
Arkansas Medical Society.

THE JOURNAL

OF THE

Arkansas Medical Society

PUBLISHED MONTHLY UNDER THE DIRECTION OF THE COUNCIL

Vol. XXIV

LITTLE ROCK, ARK., AUGUST, 1927

No. 3

Original Articles

TULAREMIA*

S. C. FULMER, M. D., Little Rock

Tularemia is an acute infectious disease caused by *Bacterium Tularensis*. It is found in nature as a fatal bacteremia of rodents, especially wild rabbits, and is transmissible to man by the bite of an infected blood-sucking fly or tick, or by the lodgment on his hands, or in his conjunctival sac, of the internal organs or body fluids of infected animals or ticks.

In 1911 (2) there occurred a very fatal epizootic among the ground squirrels of California, especially in Tulare County. In this year Drs. McCoy and Chapin of the U. S. Public Health service made an investigation of this disease and isolated the "Causative organism." They called the organism "*Bacterium Tularensis*" and the disease "a plague-like disease of rodents." While engaged in this work Dr. Chapin and one of his laboratory assistants became ill of an obscure type of fever which persisted for about four weeks. Soon afterwards, Dr. Chapin's blood serum was found to agglutinate *Bacterium Tularensis*. This circumstance was quite puzzling to these investigators, but it was the first proof on record of two unrecognized human cases of tularemia identified serologically.

In 1911, Dr. Pearse of Utah, published a report of six cases of "Deer Fly Fever." In the light of our present knowledge we know that the fever was tularemia caused by the bite of the deer fly, which is very common, especially on horses in that State. Dr. Pearse's publication constitutes the first reported human cases of tularemia differentiated clinically.

In 1914, Dr. Vail, an ophthalmic surgeon of Cincinnati, reported a case of ulcerative

conjunctivitis from which *Bacterium Tularensis* was isolated by Wherry and Lamb. This was the first human case of tularemia to be diagnosed bacteriologically. Oddly enough, in the next three years two other cases of eye infection by this organism were reported by Cincinnati eye specialists.

In the years 1919 and 1920 Dr. Edward Francis, Surgeon, U. S. Public Health Service and his co-workers, isolated *Bacterium Tularensis* from seven human cases and seventeen jackrabbits in Utah, and also proved that the deer fly is a transmitter of the disease. In 1921, Dr. Francis named the disease Tularemia, after Tulare County, California, and he, perhaps, more than any other investigator, deserves the most credit for our present knowledge of this disease.

Tularemia is reported to be the only disease which has been entirely worked out by American investigators, but in 1925, reports, sera and virulent tissue received from Japan furnish epidemiologic, clinical, serologic and bacteriologic proof of the identity of "O'Hara's Disease" occurring in Japan and Tularemia occurring in this country.

The widespread distribution of this disease is proven by the case reports from Washington, D. C., and from thirty-four States, representing every section of the United States. Twenty-five of these States, including Arkansas, made reports during the past year. Most of the cases in the West occur during the summer months, due to the prevalence of the deer fly and the wood ticks, while the South and East have their cases in the winter due to the rabbit-eating proclivities of the people during this season.

The method of transmitting this disease from nature to man constitutes an interesting link in the epidemiologic investigation. The agents of transmission are blood-sucking insects and animals. The insects are the deer fly in Utah, the wood tick in Montana, the rabbit tick and rabbit louse. The only animals

*Read before the Fifty-Second Annual Session of the Arkansas Medical Society, Little Rock, May 11-13, 1927.

yet found infected in nature are the ground squirrels of California and Utah, the jack-rabbit, the snow-shoe rabbit, the common cotton tail rabbit, and wild rats. These rodents which constitute the great reservoir of infection, manifest when dying the characteristic bacteremia, thus affording the necessary condition for ready transfer by blood-sucking insects and ticks.

Transmission from rabbit to rabbit in nature is by the rabbit tick and by the rabbit louse, neither of which bites man, but they transfer the infection from rabbit to rabbit from year to year.

When these infected rabbits are handled by man as in dressing for market or for cooking, there is great danger of transferring the *Baeterium Tularens* from the animal to an abrasion in the skin and thus the disease is contracted. It is not certain that an abrasion is necessary for there have been several cases in laboratory workers in whom no point of entrance for the infection could be found. In the West infection often follows the bite of the deer fly or the wood tick, but, as far as is known in our section, all infection has come from handling rabbits.

BACTERIOLOGY

Baeterium Tularens is a small pelomorphie organism growing on special media as short rods, cocci and bi-polar forms. It is gram negative, non-motile, aerobic and non-spore bearing.

PATHOLOGY

In infected animals there is a bacteremia with areas of focal necrosis in the liver, spleen, lungs, and adrenals. In man at first there is a bacteremia which soon disappears not unlike that of typhoid. Dr. Francis reports that one autopsy five months after onset showed the liver, spleen and lungs with focal necrosis, fibrosis and giant cells. The pathology of the cases reported by him is that of the chronic granulomata. Pathologists, unfamiliar with the lesions in man, will diagnose the tissue tubercular nearly every time.

CLINICAL TYPES

After infection the disease may take one of two courses: First, the glandular type, which is by far the most common; and second, the typhoid type, which is rare. The glandular type is characterized by a local site of in-

fection with a regional adenopathy while the typhoid type has neither a primary point of infection nor lymph node involvement.

SYMPTOMS

In nearly every case there is a history of having handled a rabbit; skinning it, drawing it, cutting it up, or in some way bringing the intestines, or body fluids, in contact with the hands. The incubation period is from one to nine days, most often from two to five.

The onset of illness is usually sudden with a chill, general bodily aches and pains, headache, nausea, vomiting more or less prostration and high fever. In the glandular cases, the patient complains within forty-eight hours after the onset of pain in the area of the lymph nodes which drain the site of infection. There is only a regional adenopathy, not general, and on examination these glands are found to be tender and enlarged. This regional adenopathy precedes by about twenty-four hours any definite reference by the patient to the site of infection, which now becomes manifest by a painful, swollen, inflamed papule, which soon forms a pustule. This pustule breaks down and liberates a necrotic core, thus leaving an ulcer about one-fourth inch wide with raised edges and a punched out appearance. The ulcer is quite refractory to treatment and persists for two or three weeks. The inflamed lymph glands become progressively worse and in about 50 per cent of the cases go on to suppuration. Those that do not suppurate remain palpable and tender for several weeks.

The fever, in most cases, runs a course somewhat similar to that of typhoid, showing daily remissions, but persisting for two, three or even four weeks.

In the typhoid type, fever is the only outstanding symptom. Fever is always present in Tularemia and, in the few cases where accurate charts have been kept, seems to show a constant sequence of initial rise for two or three days, remission and secondary rise.

DIAGNOSIS

The condition most often confused with Tularemia are: Typhoid, septic infection, malaria, influenza, glanders, pyelitis and anthrax.

The following diagnosis tetrad will seldom fail one in this disease: (1) a history of having handled rabbits or of being bitten by a fly or tick; (2) a primary lesion of the skin in the form of a papule followed by a persistent

ulcer or a primary conjunctivitis with ulceration; (3) persistent glandular enlargements in the region of the primary lesion; (4) fever of two or three weeks' duration.

The blood cell counts are not very helpful, there being, as a rule, only a slight increase in the total whites and of the neutrophils also. The urinalysis is negative. If the clinician should recognize the above tetrad of symptoms he may clinch the diagnosis (1) by obtaining an agglutination of *Bacterium Tularensis* by blood serum collected in second week of illness, or (2) by inoculation of a guinea pig with material from the primary site of infection. The pig will die within one week and its lymph nodes, spleen, and liver will show characteristic changes. The organism may be isolated, also, from guinea pig inoculation.

The agglutination is always positive in the second week and the titer rises during the third and fourth weeks in some cases to 1-2560. Agglutination persists for at least eighteen years.

PROGNOSIS

The outlook in this disease as regards mortality is good, but as regards morbidity is bad. In reports of about 300 cases there have been less than ten deaths. Three of these died of complications not attributable to the disease. There were three deaths in one family. All had the initial infection in the conjunctival sac. Tularemic patients are usually up after a month, but many cannot work for two to six months.

IMMUNITY

It is not known for certain whether one attack confers immunity, and if so, for what duration. The only instance that has been reported of a second attack in a man, was in a laboratory worker engaged daily in performing necropsies, without gloves, on laboratory animals in the Washington Hygienic Laboratory. The second attack developed two years and five months after the first attack. There was the primary point of infection on the finger with regional adenopathy, but no fever or other constitutional symptoms. The long persistence of agglutinins in the blood suggests an immunity of some degree, at least.

TREATMENT

The treatment of this condition is entirely symptomatic. Intravenous dyes, quinine, io-

dines, and many other drugs have given no benefit. Efforts to develop a specific treatment both pharmaceutically and serologically have so far been without success.

REPORT OF CASE

I saw this patient on December 12th at St. Vincent's Infirmary. It was the eighteenth day of her illness and, for this reason, I cannot give as accurate an account of the course of the disease as I would do had I seen her earlier.

Mrs. W. H. M., White, housewife, age 46. Her past history is irrelevant except for an attack of typhoid at the age of twenty-four, lasting six weeks.

On November 25, 1926, Thanksgiving Day, she became sick while preparing the evening meal. Her illness was characterized by chilliness, sore throat, general bodily pains, headache, weakness, nausea and vomiting, and soon afterwards high fever. The next day all the symptoms had subsided except the fever which continued high (102 to 104). Shortly afterwards, there appeared three sores on her fingers, two on the right hand and one on the left. These lesions soon began to discharge pus, but were not very tender. This patient did not complain much of adenopathy although it was present. The subsequent course of the illness was characterized by fever, 102 to 104, the purulent lesions on the fingers and the enlarged lymph glands.

She was admitted to St. Vincent's Infirmary for diagnosis on December 8, 1926. I first saw her on December 12th, four days later. By this time the following examinations had been made:

On December 8th—Urinalysis. This was negative except for trace of albumin.

On December 9th—Blood examination showed total whites 11,250, N 84, S M 13, L M 3. A Widal on this date was reported two plus. A blood culture was negative. An x-ray film of kidneys was negative. A cholecystography was declined by the Roentgenologist because of severe illness of the patient.

The blood counts were repeated on the 11th and 12th with practically no change from the first. Another Widal on the 12th was reported negative. Her temperature during this time was running from 101 to 103 daily.

In addition to the fever the examination revealed three ulcers on her fingers. Two of

these were typical of the disease. Each was about one-fourth inch in diameter, with raised edges, giving a punched-out appearance. Axillary lymph nodes on both sides were enlarged to the size of marbles and were somewhat tender. There was no reddening of the skin over the glands nor were there any red streaks on the skin adjacent to the primary lesion. The remainder of the examination was essentially negative.

The presence of the uleers, the regional adenopathy, and the history of continued fever, suggested to me Tularemia. I then obtained the history that two days previous to her illness she had cut up and cooked a rabbit which had been bought dressed at one of the markets on West Fifth Street. Thus the diagnostic tetrad was completed.

A suspension of *Bacterium Tularense* obtained from Hygienic Laboratory, Washington, was agglutinated by the patient's blood serum in dilutions from 1 to 10 to 1 to 1,280. Serum sent to Washington a few days later show agglutinating titer up to 5,280 which is as high as has ever been recorded.

Material from a lesion on the patient's finger was collected by M. J. Kilbry, pathologist of St. Vincent's Infirmary, and injected sub-cutaneously into the abdomen of a guinea pig. The animal died within six days and necropsy revealed the typical pathology in the spleen, liver and lymph glands of the groins. The spleen of the autopsied pig was rubbed on the shaven, abraded abdomen of another pig. This animal was dead in four days and showed the characteristic pathology. This procedure was repeated in pig No. 3, and again in pig No. 4. Thus the diagnosis was established beyond any reasonable doubt clinically, serologically, and pathologically. The organism was not isolated.

The patient's temperature subsided by lysis and she left the hospital on the twenty-fifth day of her illness. Her convalescence was slow but she apparently fully recovered in every way except for the adenopathy. The axillary gland continued to be painful and swollen and on March 30, 1927, more than four months after onset of the disease, I incised the gland and obtained about an ounce of thick, creamy pus. Healing was rapid and she has had no further trouble.

After working on that case I tried to collect the data on as many cases as possible in this

State. There have been partial or complete reports on eighteen cases distributed as follows:

Little Rock	7 Cases
Benton	3 Cases
Corning	3 Cases
Lonoke	2 Cases
Rogers	2 Cases
Fayetteville	1 Case

As far as could be learned all these cases were typical of the disease. All gave the history of handling rabbits. The incubation period was from two to five days; all were of the glandular type. In all except one the initial lesion was on the hands. This case was treated by Dr. Walton of Benton. The mother reported that some bile from the rabbit's gall bladder was accidentally introduced into her boy's eye. The course of the disease was not unusual in any other particular.

In these eighteen cases there was only one death. Dr. C. L. McNeil of Rogers reported this case. The patient died on the twelfth day of illness with symptoms characteristic of general peritonitis. There has been no mention in the literature of abdominal complications in this disease and Dr. McNeil's case is very interesting from this point of view.

My opinion is that there have been many unrecognized cases and many recognized cases not reported, and that next winter will bring many to this State.

BIBLIOGRAPHY:

1. Tularemia: Edward Francis, M. D., Atlantic Medical Journal, Vol. 30, March, 1927.
2. Tularemia: Edward Francis, M. D., Journal A. M. A., Vol. 84, No. 17, April 25, 1925.

DISCUSSION

DR. C. W. GARRISON, Little Rock: Dr. Fulmer has brought to our attention a very serious condition and a very grave problem because of its wide-spread distribution and of its economic relation. The authorities are at a loss to know just what might be regarded as a safe and sound preventive policy, as rabbits constitute a very great food in this section of the country. I tried to get in touch with Dr. Fulmer this morning, but was unable to do so, in order that I might hand him some tabulations which we have collected at the State Health Department, and with your permission I would like to read them.

A PRELIMINARY REPORT ON THE PREVALENCE OF TULAREMIA IN ARKANSAS AS SHOWN BY 520 AGGLUTINATION TESTS

Henry V. Stewart and Mildred Moss, State Board of Health, Hygienic Laboratory, In Collaboration with Dr. C. W. Garrison, State Health Officer.

The first report of a case of tularemia in Arkansas was made by Dr. J. T. Powell of Gravette, Benton Co., when he reported to the State Health

Department the death of T. J. R. from tularemia on August 13, 1925. While this diagnosis was not, so far as we know, confirmed by a laboratory test, Dr. Powell stated that his patient gave the typical picture of the disease. The history indicates that the infection was contracted from the bite of a wood tick, the bite resulting in a deep pitted lesion which was very slow to heal. The source of the infection gives this patient added interest since all cases reported since this time have traced the disease to the handling of infected rabbits.

The following year Dr. S. F. Strain of Memphis, Tenn., gave the history of a case from Manila, Mississippi Co., Arkansas, who contracted tularemia in December, 1925. Although the disease was undoubtedly prevalent over the State during the following months, no case was recognized until approximately a year later when two cases were reported from Little Rock in December, 1926. Since that time twenty-six cases of tularemia, sixteen of which have received laboratory confirmation, have been reported in Arkansas, with one additional death. A spot map showing the distribution of cases indicates that they are restricted to no focus or area. The geographical distribution by counties of the twenty-nine cases is as follows:

County	Town	Number of Cases
Benton	Rogers	3
Clay	Corning	2
Cross	Wynne	2
Dallas	Fordyce	1
Faulkner	Greenbrier	2
Lonoke	Lonoke	2
Mississippi	Manila	1
Pulaski	Little Rock	9
Prairie	Hazen	3
Saline	Benton	3
Sevier	Lockesburg	1

A circular letter sent by the State Fish and Game Commission to the game wardens in the various districts, revealed the fact that rabbits have been dying in noticeable numbers in four additional counties: Arkansas, Phillips, Searcy and Sebastian. More complete reporting both by game wardens and physicians would probably increase the number of known infected counties.

A study of the cases in Arkansas and of those described by physicians giving histories of cases in other States shows that the original diagnosis varies from tonsillitis to cholangitis, the most common being septic infection, typhoid fever, anthrax, influenza, malaria and tuberculosis. The somewhat obscure symptoms of the disease which make a false diagnosis probable, coupled with the fact that the majority of the cases reported came from urban communities, whereas the handling of rabbits is more common in rural sections made us feel that the incidence is probably much higher in the State than is known. The economic importance of the disease is obvious in view of the long period during which the patient is incapacitated; the growth of the rabbit industry in Arkansas; and the fact that tularemia is transmissible by blood sucking insects which bite both man and animal, as well as by the handling of infected rabbits.

This situation prompted the State Board of Health, through the Hygienic Laboratory, to make an investigation of the prevalence of tularemia in the State. Blood specimens for the Wassermann test are received at the Hygienic Laboratory from every county in the State. While they do not represent an exact cross-section of the population, by choosing sera at random from these

specimens for an agglutination test with *B. tularensis* we hoped to find out two things: First, whether there is an unrecognized incidence of tularemia in the State, and second, over what period of time this incidence has extended.

This investigation was made possible by the nature of the disease, and the method of making the laboratory test. The persistence of the agglutinins for *B. tularensis* in the blood of long recovered cases, even ten, fourteen and eighteen years after recovery has been shown conclusively by the experiments of Francis and Evans, U. S. P. H. S. Hygienic Laboratory reports (1926). That these agglutinins are specific they showed by a series of tests with various other normal and immune sera. Of five hundred sera received for the Wassermann test and tested also for agglutination with *B. tularensis*, none agglutinated in a dilution of 1-40. The only cross agglutination seems to be with *Brucella melitensis*, and parallel agglutination tests with the two organisms rules out any confusion of diseases.

B. tularensis antigen for the tests in our laboratory was furnished by Dr. Francis of the Hygienic Laboratory at Washington. The sera were first run in 1-20 dilution and any showing agglutination were then tested in higher dilutions to determine the final titer. Five hundred and twenty sera were thus tested with the following results:

No agglutination	512
Positive, 1-40 dilution	2
Positive, 1-80 dilution	4
Positive, 1-160 dilution	1
Positive, 1-320 dilution	1
Total positive tests	8
Percentage of positive sera	1.5

Agglutination tests with *B. melitensis abortus* were made with all positive sera to eliminate the possibility of cross-agglutination and all were negative.

We found no connection between the Wassermann reaction and the agglutination tests. The following table on four hundred sera gives the Wassermann reaction:

Wassermann Test	Positive Agglutination	Negative Agglutination
XXXX	1	50
XXX	0	3
XX	0	10
X	0	3
Negative	7	326

An attempt was made to obtain as complete case histories as possible on those cases which gave positive agglutination tests with *B. tularensis*. While physicians and patients in most cases gave us good co-operation, this presented obvious difficulties because of the time which had elapsed since the illness and the indefinite symptoms. A summary of the histories follows:

Case 1. J. B., Monticello, Drew Co., Titer 160 on January 18, 1927. No history of recent illness or glandular enlargement. Earlier history not obtained.

Case 2. W. C. S., Berryville, Carroll Co. Titer 80 on January 29, 1927. Age 24, color, white, sex, male, occupation, produce dealer. History: Mr. S. has worked with a produce company for the past six years, dressing rabbits every year in season. Two years ago (presumably in the spring of 1925), he began to have enlarged glands which did not respond to treatment. He remembers no local lesion on his hands, or fever, but stated that since that time he has been troubled with a recurrent soreness in the glands, and has been nervous

and irritable. His health has not been normal although his physicians have been unable to find any cause for ill health.

Case 3. M. L., North Little Rock, Pulaski County. Titer 320, on February 3, 1927.

Age 30, color, black, sex, female, occupation, housewife. History: M. L. dressed several rabbits about December 13, 1926. On December 20, she became ill with chills and fever. No local lesions were noted. Her axillary glands became enlarged about December 30, but did not suppurate. Irregular fever lasted about a month and her health had not returned to normal in three and a half months.

Case 4. Mrs. J. H., Gassville, Baxter County. Titer 80, on March 15, 1927.

History: Mrs. J. H. gives no history suggestive of tularemia for the past two years.

Case 5. H. McN., Little Rock, Pulaski County. Titer 80, on March 17, 1927.

Age 35, color, black, sex, male, occupation, food handler. History: H. McN. has worked in a cafe for the past four or five years, dresses rabbits in season. His only illness during that time was in January, 1926, when he had what he considered influenza. No doctor was consulted. He was

acutely ill for two weeks with fever and remained away from work a month, at the end of which time he felt normal. He had, so far as he remembers, no lesions or eruptions on his hands or enlarged glands and does not remember whether he had dressed rabbits immediately preceding his illness, but thinks quite possibly he had.

Case 6. W. S. P., Hazen, Prairie County. Titer 40, on March 17, 1927.

Age 18, color white, sex male, occupation farm laborer.

History: W. S. P. has had irregular fever at intervals since June, 1925. He had enlarged axillary glands during the winter of 1925-26. In the fall of 1926 he had a slow healing lesion near the base of the thumb. About this time he had his tonsils removed and was treated for malaria. During the period of his illness and preceding it he had killed and dressed a great many rabbits so he was unable to say whether the illness followed the dressing of a rabbit. He was unable to work in 1926 and now seems to be improving under a course of treatment instituted for tularemia.

Case 7. D., Hope, Hempstead County.

Titer 40 on March 19, 1927. Wassermann XXXX. Patient was a transient and history has not yet been obtained.

SUMMARY OF CASES

Case	Date of illness	Local lesion	Glandular enlargement	Fever	Duration of illness	Titer of serum
1	No history					160
2	Spring, 1925	No	Yes	No	2 years	80
3	Dec., 1926	No	Yes	Yes	3½ mos.	320
4	No history					80
5	Jan., 1926	No	No	Yes	1 mo.	80
6	Indefinite	Yes	Yes	Yes	1 year	40
7	No history					40
8	1926	Yes	No	No	None	80

Case 8. C. J., Ladelle, Drew County.

Titer 80 on March 19, 1927. Age 37, color, white, sex, male, occupation, farmer. History: C. J. has had intensive anti-luetic treatment for several years. He had a slow healing lesion on his hand within the past year following the dressing of a rabbit and thinks he has had similar lesions before. He gives no history of glandular enlargement or fever.

A ninth case, which does not properly belong to this series of cases, is included at this point because the date of illness can be definitely determined, and this throws some light on the period of time during which tularemia has existed in the State. On March 30, 1925, the laboratory received a specimen of pus from the finger of B. H. of Shirley, Van Buren County, to be examined for anthrax. The description of the case was recalled during the course of this work and upon request the doctor sent a specimen of blood from B. H. to be tested for tularemia. It was positive on April 11, 1927, in dilution of 1-80. The history is as follows:

B. H., age 24, color, white, sex, male, occupation, farmer. On March 21, 1925, B. H. killed a rabbit and in dressing it noticed that the organs were spotted and so fed it to his dog. In so doing he stuck a bone into his finger. In two days the pain in his finger became severe, the finger was swol-

len, and the axillary glands began to enlarge. The glands suppurated and the patient was prostrated with fever. He became weak, emaciated and nervous, and developed such a cough that the doctor feared tuberculosis. He recovered after about three months.

Discussion

While it is not likely that 1.5 per cent of the population of Arkansas has at one time had tularemia, this percentage is based in specimens selected at random from over the State and indicates that the disease is at least not as rare as has been thought. Sixteen counties have had cases in the past two years. We were not able to determine with certainty how long the disease has been prevalent, but the illness of B. H. in March, 1925, was undoubtedly tularemia, and there have probably been unrecognized cases for some time previous to this.

The cases least likely to be diagnosed correctly are those which fail to produce the classic trio of symptoms, local lesion, enlarged glands and fever. Dr. Francis divides the disease into two types, the glandular type with the symptoms as described above, and the typhoid type, where no local lesion appears and the glands are not affected, this type being the type common among laboratory workers. The twenty-nine cases diagnosed as tularemia are, so far as we could determine, con-

fired to the glandular type. The five cases in our laboratory series from whom history was obtained do not conform strictly to either type although the typhoid type predominates. The obscurity of the symptoms is probably in part due to the lapse of time between illness and getting the history, but the symptoms are so different from the classic picture as to make diagnosis without laboratory assistance almost impossible. An analysis of the cases shows that:

No. 2 had glandular enlargement with no fever or local lesion.

No. 3 had glandular enlargement and fever, but no local lesion.

No. 5 had fever without either local lesion or glandular enlargement.

No. 6 has either had more than one attack of tularemia or some other illness complicating the disease. It is impossible from his history to tell. He has had all the symptoms, but seemingly not in the expected sequence.

No. 8 had the local lesion without other symptoms that he remembers.

Conclusions:

One and one-half per cent of a series of blood specimens submitted for the Wassermann test from various counties in Arkansas gave agglutination with *B. tularensis* antigen. Such histories as we were able to obtain indicate that the patients whose blood gave positive results had at one time had tularemia.

Tularemia has existed in the State for at least two years although comparatively few cases have been recognized and reported.

From this we consider tularemia a disease of sufficient importance and prevalence in Arkansas to warrant its careful consideration by both physicians and laity. In cases of prolonged irregular fever or glandular involvement, especially if the patient is a housewife, produce dealer, market man or other food handler, careful inquiry should be made as to the handling of rabbits and laboratory tests resorted to.

Acknowledgments:

We wish to express our appreciation to Dr. G. C. Lake of the U. S. P. H. S. Hygienic Laboratory at Washington, D. C. for suggestions and to Dr. Edward Francis of the same laboratory for antigens and confirmation of some of the agglutination tests.

DR. M. L. NORWOOD, Lockesburg: The doctor says there were 18 cases reported in Arkansas. I want to report one that was interesting. On February 27, C. E. Doss was dressing a rabbit. He already had a sore hand. On March 12th, I saw the patient with conjunctivitis, glandular enlargement and enlargement of the spleen and ulcers on two fingers of the left hand. Clinically it looked like tularemia. I sent some of the blood to the State laboratory and it was confirmed.

DR. GEORGE B. FLETCHER, Hot Springs: There is one method of transmission of tularemia not mentioned in the paper which I think is very important, because of the fact that Dr. Francis found that in several families other members of the family, who had not been handling rabbits, developed the disease. He finally found that one method of transmission was in the way the rabbit had been cooked and proved it in this manner: The rabbits had been fried in open skillets and were apparently well done, but cutting down to the bone, he found that the meat appeared white

until the bone was reached when he found next to the bone a few fibers, reddish in appearance. He teased out a few of these reddish fibers, made an emulsion which he injected into guinea pigs and caused the disease. He then sent a note of warning, not only about handling and cleaning rabbits, but also about cooking rabbits properly. He said that these tularemic rabbits—if that is the proper term—would not be dangerous if lids were placed over the skillet and the rabbit was so thoroughly cooked through and through that every chance of infection would be removed by killing the organism.

Another thing, the United States claims priority in the discovery and tracing the cause of this disease and one nation, I am sure, is willing to give us full credit and allow us to continue with our research; that nation is Great Britain. They requested from Dr. Francis, that he send them some cultures; these were sent to the Laboratory of Tropical Diseases in London, England. In handling these cultures several of the technicians developed tularemia. Seeing that it was so easily contracted they immediately destroyed all of the cultures and sent a request that no further cultures be sent to Great Britain. By this, I presume that it will be up to us to continue our investigations of this disease without the aid of Great Britain.

DR. H. J. G. KOOPS, Rogers: I feel highly privileged to have been permitted to listen to this paper of Dr. Fulmer's. I think this Society is indebted to him for presenting such a classical contribution.

When these cases that occurred in Rogers were brought to my notice, I was privileged to see this man who died. I undertook to look up the subject and I found that there was very meager literature, at my command. I looked over such works as the latest edition of Fourcheimer and others.

DR. FULMER, in response: I wish to say a word with reference to the transmission of tularemia from man to man. There is just one case on record where tularemia has been transmitted from one person directly to another. This was an instance in which a boy had a lesion on his neck. His mother picked the pustule and in so doing accidentally stuck her thumb with the needle. She later developed the disease. That is the only case on record.

THE PHYSICIAN

Forgetting self, he heeds your call

Nor cares he what the hour;

Your anxious heart is filled with hope

You feel his hidden power.

He enters softly—lest you sleep—

And sits beside your bed,

He scans your face, a tender hand

Is placed upon your head.

—Margaret Helen Florine, R. N.

THE PREVENTION AND TREATMENT OF CERTAIN COMPLICATIONS FOLLOWING LAPAROTOMY*

CARL S. WILLIAMSON, M. D., Little Rock

The usual serious complications following abdominal operations are pulmonary infections, peritoneal infections, and pulmonary emboli. Any, or all of these complications may develop following an abdominal operation and all, after becoming well established, are difficult or impossible to combat.

Formerly post-operative pneumonia ranked highly as a cause of death following surgical operations, but with the advent of local and gas anesthesia the incidence of this disease has been greatly reduced. It still occurs, and very likely will continue to occur in some instances, regardless of the type of anesthetic employed. In trying to explain the development of pneumonia in some cases following surgical intervention it has seemed that we are often guilty of blaming the anesthetic employed without sufficient evidence to justify the indictment.

Surgery is often indicated in people that are markedly debilitated from either the surgical lesion or some associated disease; and a debilitated individual is open to bacterial invasion at any time. Very often, even putting one of these physical wrecks to bed for a few days will produce a passive congestion of the lungs, and a subsequent broncho-pneumonia. But with a broader understanding of these cases, and more careful attention to the pre-operative preparation of the debilitated case, when time will permit, I believe we can do much to lower the incidence of post-operative pneumonia in these already grave surgical risks.

Until a few years ago ether was the anesthetic of choice, but with the advent of ethylene gas, and the widespread use of local anesthesia, many otherwise level-headed men discarded a time-tried and proven friend for what in many instances has proven to be a fantasy. Instead of realizing the limitations of these anesthetics they have attempted their indiscriminate use, and as a result many have become prejudiced and condemn them as entirely useless. Such a situation is unfortunate if we are to receive the greatest help from the anesthetics at our disposal. It has seemed to

me that the selection of an anesthetic in any given case, if the most satisfactory results are to be obtained, depends upon (a) The condition of the patient. (b) The nature of the work at hand. (c) The facilities for administration.

Obviously a well administered ether anesthetic will produce less serious shock in a nervous, apprehensive individual, than will a poorly controlled local or gas anesthetic. Then, too, difficult operations requiring good relaxation cannot be so well nor so quickly done under a local or gas anesthetic, as they may when ether is given. I believe that we most often encounter our pulmonary complications following anesthesia in those cases that have been prolonged unduly, and in which excessive trauma has occurred because of a poorly chosen or administered anesthetic.

In summing up the data for the selection of an anesthetic it seems to me that we would save ourselves and our patients much concern if the anesthetic was selected so as to facilitate the work at hand rather than to humor the unfounded fancy of the patient or his surgeon. In other words, if the case seems to need an anesthetic affording complete relaxation use the anesthetic that will afford this relaxation and permit of rapid and thorough work rather than using a less satisfactory anesthetic which increases trauma and makes the patient more susceptible to pneumonia.

Regardless of the care that we may exercise in the preoperative preparation of the patient and the choice of our anesthetic, some of our post-operative cases will develop pneumonia. When this complication develops it is well that we have a rather definite outline of treatment if the patient is to be afforded the greatest possible opportunity of surviving. Then if despite our care, the patient begins to show evidence of bronchial infection, the question of prevention resolves itself into one of treatment. Here the benefit of unlimited fresh air cannot be over emphasized. If there be a sleeping porch available these cases should be put on it and protected from drafts, by the aid of screens. In addition, respiration is facilitated if the patient is raised to a nearly upright position on a back rest. The troublesome cough can usually be controlled by the administration of a cough mixture of terpinhydrate and codeine, or small doses of codeine at frequent intervals. Personally, I prefer the terpinhydrate and codeine, as it acts as an ex-

*Read before the Fifty-Second Annual Session of the Arkansas Medical Society, Little Rock, May 11-13, 1927.

pectorant as well as a sedative. Despite these relatively simple measures all too often the disease progresses, and in that case it is desirable to place the patient in an oxygen chamber. If this is to be done it should be emphasized that the sooner it is done the better the prognosis. If oxygen is to be given it should be used as a therapeutic agent rather than a desperate, last resort in an already apparently hopeless case. Unfortunately, oxygen chambers are expensive to construct and maintain, and as a result very few hospitals are equipped with them. However, the lack of an oxygen chamber does not prevent the use of oxygen. If one has a cylinder of oxygen, some rubber tubing, a wash bottle, a large rubber cork and a catheter, a very satisfactory method for administering oxygen can be improvised. The oxygen cylinder is connected by means of a rubber tube to the wash bottle which is partly filled with water. From an exit on the opposite side of the bottle a catheter is attached. The catheter is introduced well back into the nose of the patient and the oxygen started. It is allowed to flow through just a little faster than it is possible to count the bubbles in the water bottle. The function of the water bottle is to act as a gauge. Within a short time after the administration of the oxygen has been instituted the cyanosis begins to clear, the patient is more comfortable, and within a few hours in many cases there is a definite drop in temperature. The administration of oxygen in these cases is not a cure-all by any means, but it will shorten illness and bring about many recoveries not otherwise possible.

PERITONEAL INFECTION

Peritoneal infection, or peritonitis, is a serious complication following abdominal surgery. And I believe that there is some degree of peritonitis following every laparotomy. Fortunately for the patient and the surgeon, it is only the occasional case that causes us real concern. Peritonitis of clinical concern is characterized by a distended and silent abdomen, and increasingly rapid pulse and a relatively low temperature. The patient will also evidence varying degrees of shock or toxemia.

The treatment of these cases at most is highly unsatisfactory and it is for that reason that so much attention is given to operative and immediate post-operative treatment. Peri-

tonitis of a fatal type almost never develops under thirty-six hours and the termination of the case most usually occurs either on the fourth or fifth post-operative day. Obviously it is impossible to give within the scope of a paper such as this the details of the many outlines of treatment which have been suggested and used with varying success, in this condition, but I shall briefly outline a routine that I have found rather satisfactory and will make free use of some ideas from the majority of them. If the case is obviously a clean one and no trouble is feared, the patient is started on small doses of morphine given as necessary to control the pain, and sips of warm water by mouth post-nausea. Proctoclysis may or may not be given. But if the water is not well tolerated proctoclysis is given. I think it is very important that the patient receive between 1800 and 2500 cc. of fluid within the first twenty-four hours after operation. This helps to eliminate the anesthetic and stimulates the kidneys. Water and an occasional bit of tea or broth constitutes the diet for the first forty-eight hours. At the end of that time, if no contraindications are present, an enema is given and a routine liquid diet is started.

Cases, in which water by mouth is contraindicated, as in stomach or duodenal cases, or in which some doubt is present as to the amount of reaction likely to develop, should be kept on proctoclysis for twenty-four to thirty-six hours, or until it is possible to determine how they are to react. Except in stomach cases, where the pulse has remained below 115, it is generally safe to begin fluids by mouth, in small quantities, at the end of twenty-four hours. If no increase in pulse occurs it is as a rule safe to gradually increase the fluids by mouth until the normal intake has been reached and then to carry on as in a normal case.

The routine in a peritonitis of a more or less severe degree is often extremely difficult to contrive on the spur of the moment, and as a result, many outlines of treatment are found satisfactory at times and equally unsatisfactory at others. The one below has on the whole seemed to have much to recommend it in most instances. Upon returning from surgery, the patient is placed in a full Fowler's position and allowed to remain in that position until all danger has passed. As soon as awake, the patient is started on morphine sulphate gr. 1/6 every four hours, unless the respiration falls

to twelve or below, in which case a hyperdermic may be omitted. Subcutaneous fluids are given so that 2000 to 3000 cc. are taken in the twenty-four hour period. And here it seems well to state that if subcutaneous fluids are administered slowly that little discomfort is had from them. If too much pain is caused, the introduction of a small quantity of novocaine solution into the tubing distal to the skin needle, will do much to relieve it, and a hot water bottle over the pectoral region will promote absorption. The subcutaneous fluids are kept up for at least forty-eight hours and if at the end of that time the danger of a peritonitis seems past, as evidenced by a lowered pulse rate, it is usually safe to start little sips of warm water by mouth. During the time that water is withheld the patient should be permitted to wash the mouth frequently and should be encouraged to chew wax or gum. By doing this the salivary glands are stimulated and the danger of a parotitis is materially lessened. I have in extremely serious cases seen patients carried on subcutaneous fluids for seven or eight days, but they are very uncomfortable. It is rarely safe to keep a patient on straight morphine for longer than thirty-six to forty hours as this drug frequently produces a morphine psychosis. It is generally best sometime around the fortieth hour to begin the administration of a grain of codeine every four hours, although often this must be alternated with an occasional dose of morphine. The grain of codeine is continued for another twenty-four hours and then reduced to one-half grain. The dose is gradually reduced each day until entirely withdrawn.

The indications in these cases are physiological rest and elimination. The rest is assured by the morphine, and the kidneys are activated by the generous fluids. Distention in these cases is at times a serious problem, and while alarming to the surgeon it is a result of ileus and morphine. Lessened intestinal peristalsis affords nature an opportunity to wall off and combat the infection so that cathartics, enemas and pituitrin in the early stages of a general peritonitis are distinctly contraindicated. When audible peristalsis has been reestablished, enemas, hot stupes, and occasionally pituitrin, are of service. At times an ileus becomes so alarming that an enterostomy is indicated; but, fortunately, this type of ileus does not usually occur from a general peritonitis.

In summing up the prognosis in a case of general peritonitis, it has seemed to me that the pulse rate affords us our most valuable information. A pulse rate of 140 in a true peritonitis is of extremely grave importance. With one exception a case of peritonitis in which the pulse rate goes above 150, almost never recovers. A change of ten points in the pulse rate of a patient critically ill of peritonitis on the third or fourth day of the illness will almost certainly indicate if recovery or death is to occur. The pulse rate in a peritonitis secondary to a pelvic infection is not so valuable or reliable as it is in all other types of peritonitis. This is the exception referred to above.

PULMONARY EMBOLUS

Having gotten our post-operative patients through the dangers of pneumonia and peritonitis there remains yet another important complication about which we as yet possess little exact information. I refer to pulmonary embolus. Pulmonary embolus is not ordinarily a complication of the immediate convalescence, but rather one that is most often seen about the time the patient is ready to leave the hospital. This dread complication may occur after any operation, but is more prone to occur following laparotomy and particularly some types of abdominal operations, such as gallbladder operations and extensive pelvic operations. Certain physical characteristics seem to predispose the lesion. One of the outstanding physical defects is that very common condition, obesity. The short, obese individual with moderate hypertension is particularly prone to develop pulmonary embolus following even slight operative intervention.

The symptoms of the complication in the fatal cases are sudden pain in the chest, dyspnea, cyanosis, and collapse. Death in the fatal cases usually occurs within a few minutes after the onset, although occasionally the life of the patient may be prolonged for a few hours by the prompt administration of morphine and oxygen. Unfortunately, the non-fatal attack may be characterized by the release of one or more showers of small emboli. These pass through the right heart and lodge in the lungs. Usually the emboli attack only one side at a time; although this occurs, no anatomic reason seems to account for it. Following the lodgment of the emboli in the lung a more or less severe broncho-pneumonia and

pleurisy is developed. The sudden development of a post-operative pleurisy and bronchopneumonia in post-operative cases several days after operation can in most instances I believe be attributed to a sudden release of a shower of emboli into the venous blood stream which finds lodgment in the lung. One shower of emboli does not confer immunity to further similar attacks; in fact, in the sublethal attacks it is the usual thing to have several distinct showers. The occurrence of each attack is distinctive and it is not uncommon when the patient has survived one or more attacks to have him carried away quite suddenly by a subsequent attack.

While much remains to be learned about this dread disease of pulmonary embolism which has been estimated as being responsible for between 8 and 10 per cent of all post-operative deaths in a very large clinic, certain observations seem worth stating. Since obesity predisposes the onset of the lesion it is obvious that cases often occur when least expected in well-nourished and strong individuals. The source of the embolus is most often the iliac, the femoral veins, or the prostatic plexus. And an inflammation in these vessels is sometimes characterized by a frank clinical phlebitis, which is complained of by the patient several days before the accident. In other cases it is impossible to elicit any history of pain in the legs or pelvis from either patient, nurse, or relative. This last is the type of case most often ending fatally. When phlebitis is recognized and proper treatment instituted a fatal issue is often avoided.

In surgical cases complicated by obesity and hypertension the preoperative preparation of the patient by sane reduction methods is valuable. This preparation unfortunately is not possible in the acute cases, but it could be used more frequently than has been done heretofore. At the same time the hypertension is treated indirectly although despite all dietary management it may continue much above normal. Having gotten our patient into the best possible surgical condition we are ready to proceed with the operation. In the operation minimum trauma and as rapid an operation as is consistent with good work, do much to

lower the hazard of pulmonary emboli. A prolonged anesthesia lowers the vital resistance of a patient and opens the gateway for infections.

After operation, and as soon as the condition of the patient will permit, they should be encouraged to move about in bed. When a patient is kept in bed and quiet for a week or ten days, there is a rather marked lowering of the blood pressure. Early active motion is of value in these cases as it tends to prevent venous stasis. In addition to early movement (1) Walters has recently suggested the use of small doses of desiccated thyroid gland to maintain a more normal blood pressure. By the combination of early motion and desiccated thyroid gland, this author feels that he has been definitely able to reduce the mortality from pulmonary embolus.

SUMMARY

1. The principal complications following surgical operations are pneumonia, peritonitis and pulmonary emboli.

2. The introduction of local and gas anesthesia have markedly lowered the incidence of post-operative pneumonia. Not all post-operative pneumonias should be attributed to the anesthesia. By careful preoperative preparation, and the selection of an anesthetic suitable for the work at hand we will do much to reduce the incidence of post-operative pneumonia.

3. Splinting of the abdomen by the administration of morphine (physiological rest) plus subcutaneous and intravenous fluids afford the best results in the treatment of peritonitis. The pulse rate affords most valuable information as to the course of the disease.

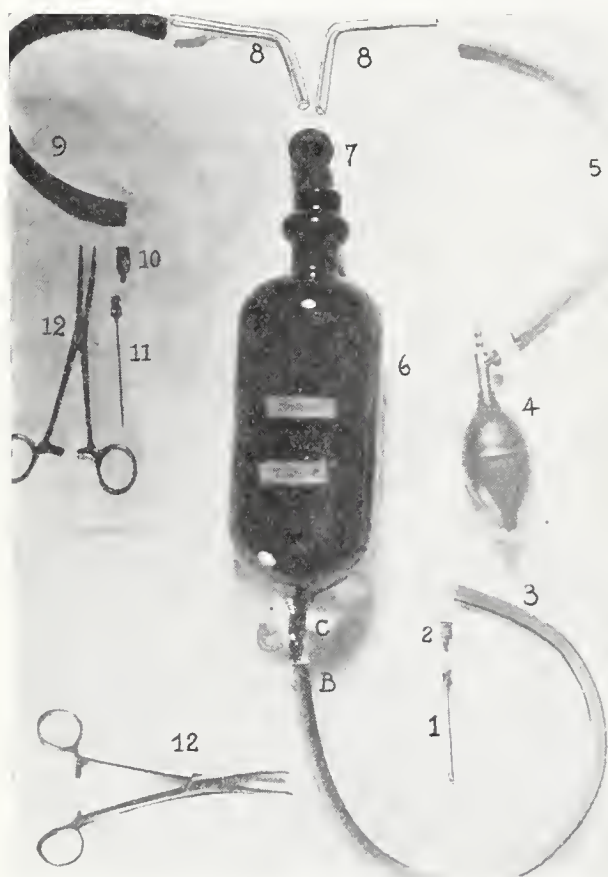
4. Pulmonary emboli are responsible for about 5-10 per cent of post-operative deaths. Obesity and hypertension predispose to formation of pulmonary emboli. The incidence of pulmonary emboli is lessened by preoperative weight reduction, minimum operative trauma, plus early active motion of the legs, and perhaps by the administration of small quantities of desiccated thyroid gland while the patient is confined to bed.

1. Walters, Waltman: The suggested use of desiccated thyroid to reduce the incidence of post-operative pulmonary embolus. Minn. State Med. Vol. X No. 1, 25-28.

APPARATUS FOR FACILITATING TRANSFUSIONS

STERLING PRICE BOND, M. D., F. A. C. S.
Little Rock, Ark.

After carefully considering the merits of direct transfusion of whole blood versus the



indirect method of using citrated blood and deciding in favor of the citrate method, we set about discovering means of facilitating this procedure and evolved the following:

In order to facilitate description of method we will first enumerate the parts necessary for carrying out the technique.

- 1 and 11. 18 gage Nickeloid needles.
- 2 and 10. Adapters to fit Luer needles.
- 3, 5 and 9. 18 inch rubber tubes.
7. 2-hole rubber stopper.
- 8 and 8. Bent glass tubes. These tubes about four inches in length.
6. Dakin's irrigating bottle.
- 12 and 12. Hemostats.
4. Blood pressure bulb.

The parts are fitted together as described below:

All parts having been boiled or autoclaved previous to assemblage except No. 4, rubber tube 3 is connected to bottle at BC. Rubber stopper 7 fitted with glass tubes 8 and 8 is inserted into large end of bottle. Rubber tubes 5 and 9 are fitted to glass 8 and 8. Adapter 10 and needle 1 are fitted to rubber tube 9. Hemostat 12 is applied to tube 3 and clamped. The whole apparatus with the exception of 5, 8, 7 and 4 is thoroughly rinsed in sterile, distilled water by applying suction to free end of 5 with needle 11 submerged. After draining off distilled water, the proper amount of citrate is aspirated through needle 11 by the same procedure as used by rinsing with distilled water. After draining, needle 11 is now inserted into a vein of the donor and suction applied at 5. The suction increases the flow of blood into bottle 6, materially decreasing the length of time necessary when other means of obtaining donor's blood is used. Suction may be obtained by applying rubber tube 5 to tonsil suction machine or by using enema bulb. The blood being withdrawn rapidly necessitates only a slight amount of agitation. Needle 1, adapter 2, and rubber tube 3 are now hooked up in series. Hemostat 12 is applied to rubber tube 9. Needle 1 is inserted into vein of recipient and hemostat on tube 3 is released. If blood does not flow into vein of recipient with ease, slight pressure obtained by use of the bulb 4 attached to tube 5 will increase rapidity of the flow. Only moderate pressure should be used, as only a moderate amount is necessary.

The advantages of this over other citrate methods are:

1. Blood comes in contact with a minimum amount of air.
2. No stirring of blood in open container with concomitant injury to blood cells.
3. Rapidity, ease and cleanliness of withdrawal and administration of blood.

Thanks for assistance in developing and perfecting this technique are due Drs. Roe and Amis and the operating room nurses of St. Vincent's Infirmary, Little Rock.

THE JOURNAL

OF THE

ARKANSAS MEDICAL SOCIETY

Owned by the Arkansas Medical Society and Published under the direction of the Council.

WILLIAM R. BATHURST, Editor
810-812 Boyle Building, Little Rock, Arkansas.

Published Monthly. Subscription \$3.00 per year; single copies 25 cents.

Entered as sccond-class matter, June 21, 1906, at the postoffice at Little Rock, Arkansas, under the Act of Congress of March 3, 1879.

Acceptance for mailing at special rate of postage provided for in Section 1103, Act of October 3, 1917, authorized August 1, 1918.

The advertising policy of this Journal is governed by the rules of the Council on Pharmacy and Chemistry of the American Medical Association.

All communications of this Journal must be made to it exclusively. Communications and items of geueal interest to the profession are invited from all over the State. Notice of deaths, removals from the state, changes of location, etc., are requested.

OFFICERS OF THE ARKANSAS MEDICAL SOCIETY			
HENRY THIBAUT,	President.....	Scott	
R. H. T. MANN,	President-Elect.....	Texarkana	
HOMER SCOTT,	First Vice-President.....	Little Rock	
J. B. WHARTON,	Second Vice-President.....	El Dorado	
O. J. T. JOHNSTON,	Third Vice-President.....	Batesville	
R. J. CALCOTE,	Treasurer.....	Little Rock	
Wm. R. BATHURST,	Secretary.....	Little Rock	

COUNCILORS			
First District—W. W. VERSER.....	Harrisburg		
Second District—J. L. JONES.....	Searcy		
Third District—M. C. JOHN.....	Stuttgart		
Fourth District—W. T. LOWE.....	Pine Bluff		
Fifth District—L. L. PURIFOY.....	El Dorado		
Sixth District—B. C. MIDDLETON.....	Texarkana		
Seventh District—DEWELL GANN, SR.....	Benton		
Eighth District—A. WATKINS.....	Little Rock		
Ninth District—SAM G. DANIEL.....	Marshall		
Tenth District—THOMAS DOUGLASS.....	Ozark		

The publishers of this Journal believe the readers have a right to trust the advertisements as much as editorials and news.

Therefore, we are careful to investigate the firms and their copy before we make contracts with them.

We will not accept advertisements of medicinal products that are not approved by the Council of Pharmacy and Chemistry of the American Medical Association. Nor will we knowingly print advertisements of any nature that are not believed to be entirely reliable.

We want every reader to say:—"I saw it advertised in my own State Medical Journal and I can safely purchase and prescribe it."

Editorial

VITAMIN DIETING IN ULCERS OF THE STOMACH

Solomon in Ecclesiastes is quoted as saying, "there is no new thing under the sun." And Solomon may have been right if his saying is applied merely in a material sense. Iron, copper and gold lay in the earth for many centuries before man found use for them. He since has learned to transport himself on the surface of the earth at a far higher speed than any animal can attain. He has learned to fly faster than any bird and to speed in boats under sea. Yet there is nothing new under the sun in material, there is newness only in increasingly marvelous ways of adapting that material. And what is true of the mechanical realm is equally true of the applied sciences, including that of medicine. Every useful ingredient and factor in medicine always has existed, the newness is in man's application of them.

A few years ago nothing was known of the properties of vitamins. Even today there are many laymen who openly scoff at the importance of them in diet and in their use in the treatment of various diseases. This, in part, may be due to the unscientific and extravagant claims made by purveyors of sundry so-called "health foods" and by their ignorant selling agents. The physician, however, is well aware of their value, properly applied, and amazing advances have been made of value in the study of nutrition. This is especially true of Vitamins A., B. and C. In the June issue of the Journal appeared in full the very excellent paper contributed by Dr. Seale Harris of Birmingham, Alabama, and read at the annual meeting of the Arkansas Medical Society held in Little Rock, in May. Every reader of the Journal should carefully peruse it, if he has not already done so. It was one of the most important papers read at the meeting.

Nutrition experts agree that Vitamin A protects against respiratory and eye infections, but Dr. Seale Harris confines himself to the uses of vitamins in diet of patients under treatment for ulcers of the stomach and duodenum. He does not agree fully with some of the authorities who have preceded him in this field and gives his reasons for criticising their conclusions. Thus he holds that the Sippy

diet for the first week of treatments contains a dangerously high ratio of fats to carbohydrates; also that hourly feeding of three ounces of food in the first week tends to overload the stomach, and on the other hand he objects to the Coleman plan of fasting for the stomach, but sustaining the patient by feeding by rectum with glucose. He has found that in the milk and cream mixtures of the Lenhartz diet, in which originally raw egg was used, the pain is more quickly relieved with the egg omitted and that under this diet the patient makes a quicker recovery. He approves the Deek's dietary suggestion of a low carbohydrate diet in treating ulcer.

It is not necessary to go further into detail. Sufficient is here given to give physicians an inkling of the value of the paper and to induce a full reading of it, except that it may be added that for further guidance of the physician, Dr. Seale Harris gives seven diet tables, showing the gradual increase of food administered together with the quantities of Vitamins A. B. and C.

DECLINE IN NATIVE AMERICAN BIRTH RATE

America, in this, its most prosperous era, is so busy making money and having a good time, that little heed is paid to a menace which will, eventually, have serious results in future generations. It is an incontrovertible fact that the native American woman best suited by education and environment, to be the mothers of the future, are not one-half so prolific as are foreign born women in America, and the daughters of the alien born. Professors Ross and Baber, after making an extensive survey, state that among the middle class of the Central States pure American families show the alarming decrease in birth rate of 38½ per cent in the last generation. The figures show that 13 per cent of the marriages were childless and in 18 per cent there was but one child. Ross and Baber compare these figures with the following alien statistics as to childless marriages among aliens in America:

Czecho-Slovak, 2.5 per cent.

Poles, 2.6 per cent.

German, 3.9 per cent.

Italian, 4.9 per cent.

They find that the intellectuals and university graduates marry late in life and few have children. Worse still, 60 per cent of the

woman university graduates do not marry at all, and of those who do, 36 per cent are childless. Thus, three-fifths of the most cultured women leave no descendants.

But, Ross and Baber give only the statistics showing the decline in the birth rate of the cultured, the intellectuals and the highly educated. Add to these the avoidance of motherhood by women of wealth and the vast army of women workers in offices, banks and mercantile establishments who do not marry and those who, having good positions, marry, but retain their jobs, remaining childless, and the outlook becomes still more serious. The army of women employed who are not university graduates, are more or less well educated and certainly more desirable as mothers of the succeeding generations than the aliens or daughters of aliens of inferior races.

It is largely a fear of America being overrun with immigrants of inferior races that led to the present restrictions on immigration. But that end will not be attained if the best types of American women continue to shirk the duties of motherhood while the progeny of such inferior races are doing the most toward peopling the country.

There is a religious problem involved also. The same people who fear the invasion of foreigners of inferior races, carry into that fear that of final Roman Catholic domination; yet it is incontrovertible that the avoidance of motherhood is chiefly among women of the protestant faith, for the Roman Catholic clergy hold birth control in absolute abhorrence. They contend it is a mortal sin, a crime against both nature and God.

These statistics, which have not been challenged, show a condition which should engage the earnest attention of all who have the future of the race in mind.

In a nutshell, the future greatness of America must depend on the parentage of the present in order to inherit those qualities of mind and body without which greatness is impossible. The native American woman of the highest types are being distanced as mothers by the less literate, less cultured, less fit to be the forbears of splendid progeny in the future. The prolific mothers of America are the rural women and those of the poorer classes of not the highest ideals. In this age of money getting, lavish spending and luxury, those women whose breeding, culture, environment and

family history would make them the ideal mothers are scarcely reproducing their part of the race. In other words, they are not more than keeping pace with the death rate. Meanwhile women and girls, as well as boys and men, are becoming excessive smokers and drinkers. A New York welfare association reports an increase of 23 per cent in juvenile delinquency and a 30 per cent increase in prostitution, and crime is rampant.

These facts render more imperative the need of paying more attention to the improving of the breed and it is well to bear in mind the fact that every preceding civilization, Babylon, Rome, Greece, Phoenicia, Persia and others, having arrived at a condition of great wealth, power and luxury, have fallen, not before foes of superior intellect, but foes of greater brute strength and in some cases absolute barbarians.

Abstracts

RADIOLOGY

The outstanding service of the roentgen ray in diagnosis, says Albert Soiland, Los Angeles (Journal A. M. A., July 16, 1927), has become a fine art, mechanically perfect and scientifically accurate. From a therapeutic standpoint, the roentgen ray occupies a unique position. Here the radiologists are confronted with complex problems and enormous responsibilities. There is as yet no reliable standardized measurement of output, no accurate method of dosage and no immediate prospect of a purely mechanical easy procedure. Many theories as to voltage, milliamperage, distance penetration, filters and field selection are promulgated and generally accepted, but the ideal amalgamation of all these factors still lies in the future. It must be obvious that it is of utmost importance for a therapeutic radiologist to be trained in the fundamental medical sciences in order to use intelligently the forces at his command. There is ample reason to feel pleased over the good already accomplished in a large list of pathologic conditions, and it is perhaps not untimely to state that the world has not yet produced a single remedy which has exerted a greater influence on human diseases than the energy of radiation. With radium, the problem is more simple. Here is a constant, potential, unwavering source of radiation energy simple in form,

easily adjusted to existing conditions and readily applied. One great source of disappointment has been with the radiologist himself attempting to accomplish the impossible with this agent, often bringing discredit on himself and unearned criticism on the element radium. Not a few medical men have attempted radium therapy with a wholly insufficient supply of radium and with even lesser knowledge of the subject. Full publicity should be given such practice in order that it be discouraged and done away with. The new Coolidge tube with its unlimited supply of beta radiation has a significant bearing on the future of radiotherapy. It is not difficult to visualize a very important place in therapy for this new form of radiant energy, but from present indications it must be approached with extreme caution, for it appears to be truly a potential death ray in a limited sphere.

Personal and News Items

Dr. E. F. Ellis, Fayetteville, visited in Hot Springs last month.

Dr. Sam G. Daniel of Marshall, spent his summer vacation in Alaska.

Dr. A. S. Buchanan of Prescott, recently attended the surgical clinics of New York City.

Dr. D. T. Hyatt has moved his office from the Hall Building to the Federal Bank and Trust Building, Little Rock.

Dr. C. C. Kirk of Little Rock has accepted the superintendency of a State Institution at Orient, near Columbus, Ohio.

Dr. T. Z. Johnson has moved from Walnut Ridge to Pocahontas.

The Staff of the Baptist State Hospital, Little Rock, July 13, elected the various heads of departments as follows: Wm. R. Bathurst, dermatology; R. F. Darnall, neurology; E. H. Wilkes, obstetrics; E. M. Hudson, eye, ear, nose and throat; I. J. Spitzberg, pediatrics; G. M. Holmes, surgery and S. C. Fulmer, medicine. Dr. Anderson Watkins is chief of staff and Dr. M. E. McCaskill is vice chief.

Dr. W. L. Wozencroft of El Dorado, has returned home from St. Louis and Chicago, where he has been attending the Urological Clinics.

The Pulaski County Medical Society held its annual picnic at Ferneliff, June 21st. Fried chicken, barbecued meat, ice cream and lemonade were served.

At a recent meeting of the Honorary Board in charge of the State Hospital for Nervous Diseases, Dr. Robt. Caldwell of Little Rock, was elected chairman of the board and Dr. Robt. P. Harris of Little Rock was elected secretary.

Dermatologist to Patient: I will have you cured within a short time.

Patient: Listen, Doctor, no rash promises.

WANTED—Salaried appointments for Class A physicians in all branches of the medical profession. Let us put you in touch with the best man for your opening. Our nation-wide connections enable us to give superior service. Aznoe's National Physicians' Exchange, 30 North Michigan, Chicago. Established 1896. Member the Chicago Association of Commerce.—(Adv).

Obituary

LAWRENCE, WILLIAM B.—Dr. W. B. Lawrence, aged 73, died at his home in Batesville, July 5, after a brief illness.

He was a graduate of Jefferson Medical College, Philadelphia, Pa., and spent about fifty years in the practice of medicine. He was popularly known as "Doctor Billy" and was born and reared in Batesville. He began the practice of his profession with his father under the firm name of Lawrence, Ewing and Lawrence, and later was associated with Dr. M. S. Craig, but for several years had practiced independently.

Dr. Lawrence was an active member of the various medical societies, having been president of the Arkansas Medical Society in 1900-1901. He had served as division surgeon of the White River branch of the Missouri Pacific Railroad since the building of that road. He had filled the office of county health supervisor since 1913. Dr. Lawrence is survived by one brother, Cleve Lawrence of Batesville.

County Societies

TRI-COUNTY SOCIETY COLUMBIA-OUACHITA-UNION

(Reported by T. H. JONES, Sec.)

The Tri-County Medical Society (Columbia, Ouachita and Union), met at El Dorado, Tuesday evening, July 5, at a banquet given by the Union County Society. Dr. J. S. Rinehart of Camden presided.

After the scientific discussion, the meeting was left open for general discussion on anything that might be for the good of the Society.

Much encouragement is felt over the start that has been made in the Tri-County Society, and it is hoped that it will be the means of stimulating better attendance in the County and State meetings.

The next meeting will be held in Magnolia, October 4.

MISSISSIPPI COUNTY

(Reported by F. D. SMITH, Sec.)

The Mississippi County Medical Society met Tuesday, July 12, in the Hotel Noble, at Blytheville.

Present: Johnson of Bassett; Ellis of Wilson; Massey and Harwell of Osceola; Hudson of Luxora; Sims of Burdette; Martin, Saliba, Usrey, Wilson, Johnson and Smith of Blytheville.

Visitors were: Drs. E. C. Mitchell, Geo. K. Livermore and John J. Shea of Memphis.

Dr. Mitchell read a paper entitled "Diagnosis and Treatment of Diarrheas in Children."

Dr. Livermore gave a talk on "Urological Problems of Interest to the General Practitioner."

The next meeting will be held at Osceola the second Tuesday in August.

FAULKNER COUNTY

(Reported by T. C. WATSON, President)

The Faulkner County Medical Society met in Conway, July 21, 1927.

Present: Watson, Smith, Hardy, McCollum, Mabry, Henderson, Cureton, McMahan, Downs, Lieblong, Munn, Kitley and Westerfield.

Dr. Westerfield read a short paper, subject: "Pellagra." Owing to the fact that this dis-

ease is prevalent at this time in every part of the country, the subject was of especial interest and an unusually free discussion was engaged in.

The next meeting will be held September 15th.

Book Reviews

Diseases of the Rectum—By Louis J. Hirschman, M. D., F. A. C. S. Published by C. V. Mosby Company, St. Louis, Mo., 1926. Price, \$6.50.

The non-surgical methods are described in this book in those conditions where they have been found of value, and the technic of operative measures under local anesthesia are given in a clear manner, and as simple as possible.

Abdominal Operations—By Sir Berkeley Moynihan, K. C. M. G., C. B., Leeds, London, England. Fourth edition, entirely reset and enlarged. Two octavo volumes totaling 1,217 pages, with 470 illustrations, 10 in colors. Published by W. B. Saunders Company, Philadelphia, 1926. Cloth, \$20.00 net.

It has been ten years since the appearance of the last edition of this work. During this time many advances have been made in abdominal surgery.

This excellent work begins with preliminary preparations and sterilization; then goes into the actual technic, carries through the complications and sequelae, right on to after-treatment. In the chapters on complications and sequelae, Sir Berkeley gives several tables showing, from thousands of cases, the complications that may follow operation. Numerous case histories, quoted from the author's own practice and those of other distinguished surgeons, give the book a clinical character that sets it apart from the usual book on abdominal surgery. Throughout the book, he teaches great respect for the principles of technic and their application.

Sir Berkeley's wide experience with a great wealth of material, both in a large private practice and during his active service in the war, combined with his international reputation as a surgeon of unusual skill, make this edition of *Abdominal Surgery* a most desirable addition to the library of every surgeon in active practice.

Young's Practice of Urology.—Based on a study of 12,500 cases. By Hugh H. Young, M. D., and David M. Davis, M. D., John Hopkins University.

With the collaboration of Franklin P. Johnson. Two octavo volumes totalling 1,484 pages with 1,003 illustrations, 20 being color plates, by William P. Didusch. Published by W. B. Saunders Company, Philadelphia, 1926. Per set, Cloth, \$25.00 net.

In the first chapter appears the original work of Dr. Young and his assistants on the *Physiology and Anatomy of Micturition*. The chapter on *Obstructive Uropathy* covers all obstructions of the urinary tract from the meatus to the kidney, giving very fully the instructions for the preliminary medical treatment, which has reduced the mortality of prostatic operations from 20 per cent to less than 1 per cent. There are three chapters on *Urogenital Infection*, copiously illustrated, and giving the pathology, symptomatology, diagnosis and non-operative treatment of all general infectious diseases of the urogenital tract. An entire chapter is devoted to the most exhaustive study of tuberculosis of the urogenital tract that has ever appeared. There are 49 pages on *Urolithiasis*, covering the pathology, symptomatology and diagnosis followed by the preventive, instrumental and operative treatment.

Every phase of benign hypertrophy is covered. Malformations and abnormalities of the urogenital tract are described in a most interesting and practical way. Traumatism and foreign bodies of the urogenital tract are fully described. The chapters on *Uleerative Lesions of the Urogenital Tract*, on *Diagnostic Significance of Special Symptoms* and on the *Examination of the Urologic Patient* are of great practical value. The section on *Operations* comprises eight chapters and is most inclusive, describing with great detail and thoroughness every step in the operation from anesthesia to the final suture.

Modern Clinical Syphilology.—By John H. Stokes, M. D., Professor of Dermatology and Syphilology in the School of Medicine, University of Pennsylvania; Professor in the Graduate School of Medicine, University of Pennsylvania. Octavo of 1,444 pages with 885 illustrations and text figures and more than 200 detailed case histories. Published by W. B. Saunders Company, Philadelphia, 1926. Price, Cloth, \$12.00 net.

This splendid textbook gives a complete digest of the subject of syphilis. The manner in which the case histories are presented provides a most interesting "dry clinic." It is monographic because only in this way does it seem possible to impart into it a measure of the unity and cohesiveness which teaching and practice in this field seem to need.

New and Nonofficial Remedies, 1927—Containing descriptions of the articles which stand accepted by the Council on Pharmacy and Chemistry of the American Medical Association on January 1, 1927. Cloth. Price, postpaid, \$1.50. Pp. 473 XLVII. Chicago. American Medical Association.

The appearance of the annual edition of *New and Nonofficial Remedies* is looked upon as an event among all those interested in drugs and their therapeutic use. The text is so carefully scrutinized and revised each year by the various members of the Council on Pharmacy and Chemistry that each issue is essentially a new book, a safe guide to the frontier that lies between the official drugs and the latest preparations launched by the pharmaceutical manufacturers.

The mechanism of the book is excellent; each preparation is classified, and each classification is preceded by a general and critical discussion of the group by one who is an authority on the subject. There is an exhaustive index not only to the contents of the book, but also, separately, to the literature concerning the host of preparations that the Council has

found unacceptable for inclusion. A glance at the book shows that the most important single revision this year is that of the general article on Lactic Acid-Producing Organisms, which has been radically revised and rewritten to show the present status of therapy in this field. Further perusal shows that many preparations have been omitted. The preface explains that many of these have been omitted because the manufacturers or distributors have not presented evidence to demonstrate their continued eligibility. Some have been omitted because they have become official articles by inclusion in the tenth edition of the U. S. Pharmacopeia; such articles, when marketed under the pharmacopeial name or synonym, and without special claims, do not require description in *New and Nonofficial Remedies*.

New and Nonofficial Remedies is indispensable to any physician who prescribes drugs. It contains information about medical products which cannot be found in any other publication.

Want X-Ray Supplies "P-D-Q"?

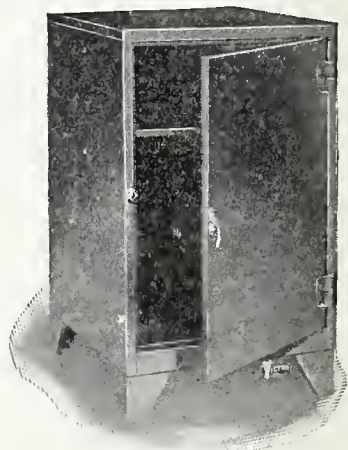
There are over 30 District Branches now established by the Victor X-Ray Corporation throughout U. S. and Canada. These branches maintain a complete stock of supplies, such as X-ray films, dark room supplies and chemicals, barium sulphate, cassettes, screens, Coolidge tubes, protective materials, etc., etc. Also Physical Therapy supplies.

The next time you are in urgent need of supplies place your order with one of these Victor offices, conveniently near to you. You will appreciate the prompt service, the Victor guaranteed quality and fair prices.

Also facilities for repairs by trained service men. Careful attention given to Coolidge tubes and Uviarc quartz burners received for repairs.

VICTOR X-RAY CORPORATION
Main Office and Factory: 2012 Jackson Blvd., Chicago

Memphis - - 407 Madison Avenue
Oklahoma City - 206-8 Lynds Bldg.



Victor X-R-P Safe

A lead-lined steel cabinet for storing films and loaded cassettes.

Write SUPPLY SALES DIVISION for price and detailed information.

Quality Dependability Service Quick-Delivery
~ ~ Price Applies to All ~ ~

THE JOURNAL

OF THE Arkansas Medical Society

PUBLISHED MONTHLY UNDER THE DIRECTION OF THE COUNCIL

Vol. XXVIII

LITTLE ROCK, ARK., SEPTEMBER, 1927

No. 4

Original Articles

THE TREATMENT OF DIARRHEA IN CHILDREN*

DON SMITH, M. D., Hope

I shall not attempt a classification of diarrheas, other than the simple one, of parenteral and enteral.

The parenteral type is brought about by infections from without the intestinal tract, and I shall mention the most common of these.

Perhaps the most common cause of the parenteral type is otitis media.

As this paper has to do with treatment rather than pathology, we pass this just to say that this type of diarrhea requires no change in the baby's food formula.

If a breast baby, put it to the breast at its regular feeding hour. If bottle-fed, go on with the same formula.

About all that is needed to cure these mild cases caused by ear conditions is appropriate treatment directed toward the relief of such condition. For instance, if there be no bulging, but redness around the drum, and the pearl-like drum is changed to a ground glass or dark color, phenic acid and glycerine applied to drum, together with a cold pack, may cause a disappearance of all symptoms of inflammation and the diarrhea as well. If there is bulging of drum, a well-done paracentesis will *usually* bring about prompt relief.

I said this procedure will *usually* bring about prompt relief; but we are taught now that every case of otitis media in an infant, has an associated mastoiditis.

This condition (mastoiditis) will produce a very severe and even a fatal diarrhea, if not met promptly with proper surgical measures. There may be no bulging of the drum membrane; but we are told by those who see this

particular type of thing, that three symptoms are always present, viz: profuse, watery, uncontrollable diarrhea, tenderness of some point over mastoid cells, and a discoloration of the drum membrane.

In my own practice, I recall many cases of mild diarrhea associated with ear troubles, but I cannot recall a case of anhydremia due to a mastoiditis. But that they do occur, and rather frequently, has been clearly demonstrated by Alden and Lyman.

In a certain hospital, presided over by the very best clinicians in the country, in 87 per cent of the anhydremias, otitis media was found.

A word here, if you please, and I say it with a feeling of fellowship: If you are not equipped with otoscope or other means of making aural examinations, equip yourself at once, and in every case of diarrhea or other disease, take a look at baby's ear drum. You will treat some of your diarrheas more intelligently, and maybe save some lives.

Another type of diarrhea of parenteral origin, is that cause by pyelitis.

An examination of urine, or I should say, repeated microscopical examinations of urine, should be a routine in the treatment of diarrhea and quite frequently will explain some of our cases which do not yield to the dear old time honored tincture catechu, calomel, bismuth, etc.

No change in baby's food is necessary here, unless, indeed, you desire to change to sour milk, which, by the way, can always be done, no matter what the cause of the diarrhea.

The treatment will of course be directed toward the cure of the pyelitis.

The above mentioned are perhaps the most important of parenteral causes of diarrhea, especially in young infants.

As to enteral infections, it is folly to attempt a classification of these, and as this paper has to do with treatment only, it will not be necessary.

*Read before the 52nd Annual Meeting of the Arkansas Medical Society, held in Little Rock, May 11, 12, 13, 1927.

I wish to begin a discussion of the treatment of enteric infections, by mentioning the drugs that are useful. I put the medical treatment first, because I think it is of less importance than some other measures.

There are perhaps three or four drugs that are useful in the treatment of diarrhea. One, in particular, is of undoubted value, viz.: Opium in some form. If the stools be frequent and watery, opium in the form of paregoric or laudanum should be given. If the stools are frequent and bloody, with a great deal of tenesmus, again an opiate is urgently demanded, and should be given to effect.

These two conditions, profuse, watery stools, and frequent and painful tenesmus, cover the indications for opium, as far as I am concerned.

Another drug of some value is bismuth in some form; but must be given in relatively large doses and at three and four hour intervals. Silver salts may be of some value, and will be referred to later.

Calomel or other mercury preparations are useless and probably dangerous.

Oleum Ricini, a favorite old standby of every household and many doctors, should be reserved for the parent who gives it and the doctor who prescribes it. It is admissible, possibly, when there is a great deal of distention, because it will remove from the intestinal tract nearly anything that gets in its way; but usually it is sickening to the patient and thus upsets his digestion, which is a calamity when it happens in a case of severe diarrhea.

Another procedure in common vogue in the treatment of the bloody type of diarrhea (colitis) is colonic irrigation. In my hands, this has been a useless and positively harmful procedure, and I never resort to it, except in cases where there is abdominal distention, and I am trying to get rid of the gas without resorting to the old "pet" castor oil.

As soon as I attempt to introduce a rubber catheter or small rectal tube into the bowel, the child begins to strain, and the pain is terrific. A very sick child will be only the worse when I have finished this brilliant performance.

Soothing applications, as of starch, bismuth and laudanum enemata, which can be put in quickly, may be of some value, but I must confess I am dubious even here.

What, then, are we to do in a given case of enteric infection?

In the milder types about all we need to do is to feed the baby something that bacteria cannot thrive on.

Sour milk is usually about all that is necessary.

If the baby is breast fed, we will hesitate to change to artificial feeding; but as sweet milk is one of the best known culture media for bacteria, it is evident that we should not encourage the "bugs" by giving them the food they thrive on.

In these cases I try to feed the baby two or three ounces sour milk just before it nurses the mother. This will mix with the breast milk in the stomach and will probably inhibit the rapid growth of bacteria.

It is important that the mother empty the breast at each nursing, in order to keep the milk glands functioning.

In some instances the child will refuse the sour milk, then it should be sweetened with corn syrup. If the sugar is not well borne, sweeten with saccharine (1 gr. to a pint of sour milk). Patience will usually win in these cases, and the child will take the sour milk in good quantities.

A word as to when to begin feeding these cases. There is nothing gained by waiting two or three days. Begin the sour milk at once, unless vomiting prohibits, and then small amounts at short intervals will do no harm. There is no contraindication to the use of sour milk. Let me urge that the child be given enough milk. See that it gets enough by personally superintending a few feedings. Remember that if the child goes a few days without food, he is burning his tissues rapidly and the loss of weight will be rapid.

In the severe cases there are two things which must be guarded against, viz.: Starvation and water loss.

Food should be given immediately, preferably in the form of skimmed lactic acid milk. The calorie value of the skimmed lactic acid milk is only 10 calories per ounce.

This would manifestly lead to loss of weight, as whole milk contains 20 calories per ounce. So in twenty-four or forty-eight hours, some form of sugar should be added to bring up the calories. The choice of sugar requires a little attention. Lactose would be too laxative, and would be out of question.

Cane sugar (saccharose) has the same property to a slightly less degree.

Dextrin is not readily fermentable, but is digested rather slowly. However, it is probably the best here, for the reason that it is not easily fermentable. Red Karo syrup contains 55 per cent dextrin, 25 per cent maltose (which is rapidly absorbed from the intestines), 15 per cent glucose, also rapidly absorbed, and 5 per cent cane sugar. This you will observe, is a mixed sugar, and causes less disturbance in the intestinal tract than one kind of sugar, because some bacteria will ferment one kind of sugar, and won't ferment another. Then, Red Karo, added to the lactic acid milk will bring the calories up and by adding it cautiously will likely not increase the number of stools. As the child improves, whole lactic acid milk plus Karo should be given.

Now, if the baby absolutely refuses to take the sour milk, after patience and persistence on part of mother or nurse, we will have to resort to cooked sweet milk. It is here the silver salts play their little part in the game.

A teaspoonful of a 10 per cent solution argyrol added to four ounces milk, will inhibit bacterial growth. This makes a nasty looking mixture, but if borne by the stomach will answer very well. It cannot be continued longer than 36 hours for fear of argyria. In desperate cases, any of the above mentioned foods may have to be introduced into the stomach through a tube. One thing is sure, the child must be fed in some way.

Water loss must be prevented. It is absolutely imperative in the several types of diarrhea to keep the body fluids as nearly as possible.

This can only be effectively done in two ways, by mouth, or intraperitoneally.

By mouth is preferable and if the child is not wasting too rapidly, it can be induced to take a great deal of water by salting the water just a little to make him thirsty. A nursing bottle or other vessel (according to age of child) of cool, boiled water, should be placed within reach. It is surprising the quantities children will take in this way.

If wasting too rapidly to be supplied by mouth, we must resort to intraperitoneal injections of normal saline solution. This should be repeated as often as necessary, two or three or more times in twenty-four hours. It is not at all difficult to do and is not a very dangerous procedure. It should not be undertaken if there is distention of abdomen, until

the gas has been removed by enemas (the only place where an enema is admissible) or other means. With the gas removed, a needle is thrust into abdomen and the solution allowed to flow in. Fill the abdominal cavity comfortably full, and repeat as often as necessary.

There are two serious complications to watch for in these severe diarrheas, viz.: Acidosis, and suppression of urine.

In bloody diarrhea you may have the acetone body type of acidosis, while in cholera infantum you may have lactic acid type.

In the acetone body type, you will find glucose and insulin your sheet anchor, while in the lactic acid type, which is caused by water loss, saline solution, intra-peritoneally, will be absolutely imperative.

For suppression of urine, use saline solution freely first, and in thirty minutes to one hour, give 5 per cent glucose solution. Do not give the glucose first, as you will further dehydrate the patient.

A word more about other foods than milk.

In older children, sometimes we are put to it to feed these children, as they "balk" on milk alone.

I cannot tell you why, but on the authority of a splendid clinician, cream of wheat, cooked two hours in a double boiler, is allowable in these cases, especially in dysentery.

I have been in the habit, for the past season, of allowing cream of wheat rather liberally, and as yet have not had occasion to regret it. It is easily digestible and rather quickly absorbed from the intestinal tract. Broths, made from chicken, mutton or beef, I have allowed in the milder cases, but always with the feeling that I might be doing wrong. However, I have them salted pretty freely; this makes the patient thirsty, and enables us to get in more water. The food value of broths, though, is negligible. It is only a break in the monotony, and the child deserves the break, if there are any coming.

A final word about the hyperpyrexia seen in these cases. Fever mixtures are positively contraindicated. Cold packs to head and body, if well borne, may be resorted to. A great many children seriously object to cold packs, and will constantly fret and worry, hence are better off if left alone. If the temperature persists around 103 or 104 degrees for two or three days, there is only one remedy that

promises anything, and that is saline solution in peritoneal cavity.

You can hardly get enough under the skin, but even this should be resorted to, rather than nothing at all. If hypodermocentesis is resorted to, put it in several places, and get in all you can the first time, as the parents will generally object to a second attempt.

If I have written anything here that will stimulate a little more study of children's diseases, if it will help to save the life of a single child, if it will cause the general practitioners (of which I am one), to see the necessity for prompt action in these severe cases, and if they do not care to assume the responsibility, rush the child to some one who will assume it, this paper will have served its purpose.

I claim no originality for anything in the paper, but I do practice the things advocated herein, when possible, and I have had the extreme satisfaction of seeing a few cases recover that in my earlier career would have died. Our textbooks are full of medical history, and unimportant claptrap. I have several works on diseases of children, and I couldn't do without them, but they certainly do not stress the life saving measures that would help the small town doctor. We should have a good pediatrician in every small town, and he should be given the children's practice when possible.

DISCUSSION

DR. R. H. T. MANN, Texarkana: I have enjoyed very much Dr. Smith's paper. I think he is entirely right about having the ears of these patients examined. In a great many of these cases where the mastoid is involved, a prompt paracentesis will give relief. In other words, in many cases of mastoiditis, the x-ray will show a clouded mastoid, but the mastoid can be relieved by a paracentesis and in that case it will not be necessary to do a mastoid operation. The fact of the business is that in nearly every case of middle ear involvement or in inflammation of the middle ear itself, you have some involvement of the mastoid cells. That may be very slight, or it may be extensive.

I think an x-ray should be taken in all of these cases of both mastoids, so as to compare one with the other. Then you will have a better idea of what to do and whether or not an early paracentesis is needed to be performed on the baby. Some of these ears will not heal after a paracentesis. Should they not heal promptly, the probabilities are that the child has adenoids and infected tonsils. If it is a baby it may have to be treated in order that a drain may be established through the Eustachian tube. That is usually why they do not heal.

Now, let me tell you something else that has been puzzling to me for a number of years. A great many cases of infection of the sinuses and

respiratory tract occurred in one town, Iowa City. There was a Dr. Dean living in Iowa City, who reported an enormous number of infections of sinuses in children, in babies, occurring in that town, and everybody was puzzled to know why so many babies in Iowa City were affected with a mild infection of their sinuses. Last fall, the dietitian, Mrs. McDaniel, of the State Hospital, living in Iowa City, came to our meeting at Colorado Springs, with a number of cages full of white rats. She had rats sneezing and sniffing, and she had rats that looked like they were about to die and they would have died. Her point was that these rats that had sinus infection were all due to faulty nutrition. She said these rats that had been fed on a balanced diet of vitamins A, B, C and D were perfectly healthy and she demonstrated that the ones whose nutrition had been faulty were the ones that were sick and had the sniffles.

DR. PAUL H. POWER, Pine Bluff: I am glad to hear somebody else mention the old adage of castor oil and calomel because it makes me feel better. When I call to see some of these cases of diarrhea the first thing the mother wants is a dose of calomel, followed by castor oil, and if I don't give it she immediately calls in the family physician who will.

There are just a few points I would like to add to Dr. Smith's very excellent paper. First, Dr. Mann, in his discussion mentioned the ears. I have been attendant at a number of cases of diarrhea following acute ears and found that the instillation of ice water in the ears every ten or fifteen minutes would relieve the majority of the badly inflamed ears without paracentesis, if seen soon enough before the abscess has formed.

Dr. Mann also mentioned the ears discharging so long. I have a case at home which has been discharging eight or nine months and the mother refuses repeatedly to have the tonsils and adenoids removed and now I think nothing less than a simple mastoid will relieve this chronic purulent discharge.

I would like to add another type or two to Dr. Smith's classification of diarrheas especially found in the older children, above two years old; that is, the putrefactive type. In the beginning of the hot weather this year I had several severe cases of that diarrhea, that I put on sour milk and proteins. They seemed to get worse in place of improving. The tenesmus grew more severe and there came more blood in the stools, and my attention was called to the fact that I was treating every case of diarrhea as a fermentative type, by a paper from the Archives of Pediatrics, written by a general practitioner of Vermont, a very excellent one, describing and differentiating these two types. If we will examine the stools closely in each case of diarrhea and pay close attention to the buttocks, whether or not there is any irritation, and in getting the history will pay close attention to the type of stools the mother describes, we will find that the putrefactive type has a very offensive odor, which can be detected all over the house. The stools are full of curds that are stiff and hard to mash up, and of a brownish color. These stools are alkaline to litmus, and even with ten to twenty stools a day the little buttocks will show no irritation whatsoever. In these cases if we immediately switch to a carbohydrate diet, preferably lactose, dextrose, lactose cereal composed of equal parts of cereal and lactose, malted milk, sweetened with dextri maltose, and absolute abstinence from milk for at least two weeks,

these cases will immediately show improvement. After the toxic symptoms have cleared up we can gradually begin adding top milk to their diet and finally the whole milk.

I failed to mention the fact that we have our highest fever with the putrefactive type.

Regarding the washing of the baby's stomach, I have found that a good nurse or good mother can force enough of a strong solution of soda by mouth to wash out the baby's stomach without the use of the stomach tube, and it is so much more pleasant unless you have the child in a hospital. In the severe types with vomiting, I have found after washing the stomach with soda solution that 25 per cent solution of dextrose and lactose will give relief from this vomiting. In the more severe types I sometimes resort to atropine in large doses and small doses of chloretone.

In cases of acidosis it is true that rectal irrigation is not retained very well, but if you can insert the catheter high enough and give a strong solution of soda usually the child will retain enough to be very beneficial.

THE IMPORTANCE OF SINUSITIS*

PAUL L. MAHONEY, A. B., M. D., F. A. C. S.
and D. A. RHINEHART, A. M., M. D.,

Little Rock

The cranial sinuses, also called the nasal accessory sinuses or the paranasal sinuses, compose a complicated set of air spaces within the bones of the skull all in direct communication with the nasal cavities. They present great variability in number and size. The smallest number of such air spaces ever encountered is approximately twelve, while there may be as many as thirty or more. The usual number is about twenty.

Because of their number and extent they have important relationships with the nasal cavities, the upper teeth, the orbits, optic nerves, cavernous sinuses, pituitary body, and the brain in both the anterior and middle cranial fossae. The frequency of acute infections of the nasal mucosa and the ease with which such infections may extend through the openings of the sinuses makes sinus infection a common but neglected ailment. When so infected they are capable of producing grave pathological conditions throughout the whole body.

To prove my contention that sinus infection is often overlooked I wish to briefly report a few cases. The first is that of a prominent local attorney who was treated by several physicians for a protracted head cold. He was finally directed to a gymnasium where

he was assured of a cure. In these ways, before he came to us, he spent at least six months time. Examination showed a number of polypi in the nose, the removal of which resulted in a clinical cure.

The second case is that of a minister's child, who had a purulent discharge from one side of the nose. This child had been treated for three months without improvement. Examination showed a small rock in the nasal cavity which had excited a sinusitis.

The removal of the rock and simple treatment resulted in an immediate relief from symptoms.

The third case is that of a medical student in our local medical school who was referred to me by an internist for an examination of the nose to complete a general physical examination. His complaints were loss of weight, loss of appetite, general malaise and an inability to concentrate his mind on his studies. He had just returned from the largest clinic in the United States, where nothing was found wrong with him. While examination of the nose revealed nothing of significance, x-ray of the sinuses showed a bilateral purulent maxillary sinusitis. Simple operation and treatment effected a cure.

The fourth case is that of a middle aged woman who came to my office complaining of symptoms similar to those of the last case, and an occasional obnoxious odor from the nose on expiration. She stated that she had spent one hundred and fifty dollars for medical examinations without relief. The nose appeared normal, but further study, including x-ray of the sinuses and irrigation, showed that the left maxillary sinus contained a small amount of foul-smelling pus. A radical operation was necessary to effect what seems to be a permanent cure.

In two of these cases the condition produced only local symptoms pointing directly to the cause of the trouble. In the other two the symptoms were generalized with very few, if any, indications pointing to the sinuses as the cause of the trouble. Although both of these patients had been examined in very good medical institutions by capable men, the failure of examination of the sinuses was the direct cause of the failure of these patients to obtain relief.

This leads up to the chief point that I wish to make in this paper and that is, that a physical examination is incomplete unless a study

*Read before the 52nd Annual Meeting of the Arkansas Medical Society, held in Little Rock, May 11, 12, 13, 1927.

of the nose and its accessory sinuses are included in it. This is especially true when any condition exists which is believed to be due to some undetected focus of infection in the body. Physicians have been taught, and are being taught, to look for such foci in the tonsils and around the teeth. Probably the sinuses are not as important as foci of infection as are the tonsils and teeth, but in many cases they are the origin of the trouble. For this reason, an examination of them should constitute a part of any routine physical examination.

Probably the most common cause of acute sinusitis is an extension of the nasal infection in acute coryza or rhinitis through the openings into the sinuses. These usually subside, but they may persist. A head cold that persists for any period of time is almost always due to a complicating infection of the sinuses. The next most common cause of such infections are the infectious diseases. Of these influenza is said to be complicated by sinus infection in 75 per cent of cases. Scarlet fever, measles, diphtheria, pneumonia and facial erysipelas may also be complicated by sinusitis. Abscesses at the apices of the roots of the upper molar and bicuspid teeth are a factor in the causation of infection of the maxillary sinuses. Occasionally trauma and the presence of foreign bodies in the nose may be followed by sinus infection.

The symptomatic picture of sinusitis may be divided into three parts, the local symptoms, the general symptoms, and the symptoms of complications. The local symptoms are headache, discharge, disturbances of the sense of smell, disturbances of respiration, and gastric disturbances.

The location, periodicity and intensity of headaches from sinus infection present great inconstancy. Headache may even be absent. When present, periods of intense headache alternate, at longer or shorter intervals, with periods of freedom from pain. Patients with habitual headache should be suspected of having sinus disease. Headache occurring at a certain time each day and lasting for only a short time is usually caused by sinusitis. Pain over the sinuses intensified by pressure, often occurs in acute sinusitis. In chronic inflammations the headaches are most often diffuse and indefinite. Days or weeks of freedom may be followed by days or weeks of severe pain. These are often frontal in location, but they

may be in the posterior part of the head or the vertex. Such headaches always occur in the same place.

Nasal discharge is the most common and often predominating symptom of sinus infection. This discharge may be mucus, mucopurulent, pure pus, or a fetid secretion. While this symptom may at times only slightly inconvenience the patient, again large amounts of secretion may be produced requiring the use of many handkerchiefs. At times an abundant secretion may flow backwards into the naso-pharynx and be swallowed or removed by clearing the throat.

The diminution or loss of the sense of smell may be caused by retention of secretions in the olfactory fissure, by degeneration of the middle turbinates, or atrophy of the mucus membrane in the olfactory region. Difficult breathing may be due to turgescence in the acute stages, and from hypertrophies and polypi in chronic disease. Gastric disturbances include gagging and vomiting from an irritability of the pharynx and chronic gastritis with hydrochloric acid absent from poisoning due to the swallowed pus.

In addition to fever, which rarely occurs, the general symptoms are of two classes. In one, flushing of the face, acceleration of the pulse, spots appearing before the eyes are the chief complaints. In the other form, there is a peculiar form of depression with slow pulse, palpitation of the heart, inability to concentrate the mind and a distinct melancholia. The symptoms of the complications include those produced by extension of the disease to the orbits or cranial cavities with probably a rare case of generalized pyemia or septicemia. Laryngitis, pharyngitis, disturbances of vision, catarrhal otitis with loss of hearing, chronic bronchitis, asthmatic attacks, chronic cough, especially in children, some cases of parenchymatous nephritis also in children, and the various forms of arthritis and neuritis are frequently complications of sinus infection.

The diagnosis of sinus infection depends on the finding of pus in the nose, on transillumination of the sinuses, and on the results of x-ray examination. The most characteristic finding is a purulent secretion in one side of the nose which immediately reappears after it has once been removed. If this occurs under the middle turbinate, it indicates empyema of one of the anterior sinuses, either the

frontal, the maxillary or the anterior ethmoidal cells. If it occurs in the olfactory fissure it indicates infection in the posterior ethmoidal or the sphenoidal sinuses.

Such findings as this depend on the examination of the nasal cavities by the use of head mirrors, nasal speculae and other instruments. If a physician takes the trouble to equip himself with the necessary instruments and to learn the normal and pathological appearance of the nasal structures, such examinations can be rather easily made. At this time in my lectures at the medical school, I am encouraging the students to familiarize themselves with these regions, and to take advantage of the clinics offered them, in the hope that their patients will receive more thorough examinations and that they will develop into better doctors. I would also encourage those of you who are engaged in the general physical examination of patients to do likewise.

Transillumination and x-ray examination depend for their value on the interference of the passage of the light or x-rays through the infected mucous membrane and retained secretions, the first appearing as irregularities in the illumination of opposite sides of the skull, and the other as irregularities in the densities of the shadows of the sinuses as shown on x-ray films. Although by no means absolute, we have learned to place great reliance on the findings of competent roentgenologists with reference to the presence or absence of infection in the cranial sinuses.

The treatment of sinusitis would make this paper too long so that it will be omitted. I have attempted to indicate to you the importance of sinus infection, have pointed out some of the suggestive symptoms, and wish to emphasize particularly the fact that a nasal examination should be a part of each physical examination, and that when this is not included, sinus infection, causing either local or general symptoms, will often be overlooked.

DISCUSSION

DR. R. H. T. MANN, Texarkana: I want to congratulate Dr. Mahoney and Dr. Rhinehart on the presentation of these x-ray slides. It has been more than twenty years since I first began to study sinus infection. Now, all infected sinuses will not be revealed by the x-ray. An examination of the nose itself will not give you a lead to every case. I want to say that every single patient, if there is any sign of focal infection or any trouble that cannot be found in any other way, should have his nasal sinuses examined by x-ray.

I will just report one case: Some time ago a man was brought to me giving a history of some kind of focal infection, he didn't know where, except that he was having some pain in his back. Now, this man's brother had been an invalid for twelve months and was being rolled around in an invalid chair, without the cause of his trouble having been found.

This man gave absolutely no history of any nasal infection. The examination revealed nothing from which a diagnosis could be made. I told him to go and have an x-ray of his sinuses, which he did. After I had made a careful examination of his nasal passages in my office the x-ray revealed an infection of the maxillary sinus.

DR. H. J. G. KOOBS, Rogers: The paper is one that I believe is of considerable importance and while rather complete, much more may be said in this connection. I would just like to emphasize a few of the points I think need stressing.

In the first place, the existence of paranasal sinusitis is far more common than is ordinarily recognized. I think it is one of the most neglected phases of medicine. I have known of patients being treated for years from top to toe for various things really being semi-invalids, finally showing that their trouble was in one or more of the paranasal sinuses.

Another thing, the cause, I think the greatest predisposing factor is intra-nasal deformity, a deformed septum, etc. In other words, anything interfering with the drainage of these sinuses is the important factor in establishing the sinusitis. Secondly, debilitating diseases producing lessened resistance making these sinuses more vulnerable to infection, the prominent one of which is, by all means, influenza; not that the influenza bacillus is the etiologic factor itself, but the debilitating condition ensuing and the subsequent secondary infection with its long train of delayed convalescence, constant colds, etc.

Again, sinusitis is not necessarily purulent. A great many of these chronic sinuses present hypertrophic granular tissue with chronic infections.

Another thing to remember is that pan-sinusitis very often exists. If we find something in one sinus, don't overlook the others. Again, an infection of the antrum of Highmore and of the sphenoid sinus is, I think, very frequently secondary to infection of the upper sinuses, particularly the frontal and posterior ethmoid. In fact, the frontal and anterior ethmoids are commonly infected together, draining into the antrum of Highmore and the sphenoid sinus acts as a catch-basin for the pus that is extruding from the post-ethmoid sinuses.

One of the important complications of infection of the posterior sinuses is retrobulbar optic neuritis. You will remember how the optic commissure overlies the sphenoid, I have seen a number of specimens where there was complete absence of bone so that the infection from the underlying sinus could be easily communicated to the optic commissure and optic nerve back of the optic bulb, with ensuing blindness. This condition has been known to exist for weeks and, with drainage of that underlying sinus, being relieved and sight restored.

As to the roentgenograms, they are absolutely important provided you can get a good man to do them for you. Many of the x-rays I have had made for me were almost worthless.

I wonder why Dr. Rhinehart, in showing these pictures, didn't show a lateral view, particularly of the sphenoid. To my mind, I can get better

pictures of this sinus laterally than anterior-posterior. That is my experience, anyway.

DR. RHINEHART, in response: Dr. Koobs asked about lateral views of the cranial sinuses. In such views the sinuses of opposite sides are superimposed so that a comparison of one side with the other is impossible. Formerly it was our practice to make two postero-anterior views and one lateral view. Excepting to show the depth of the frontal and sphenoid sinuses, lateral views give such little information that unless they are especially requested, we do not take them. We now take three postero-anterior views at different angles. We believe that we get more information from the additional postero-anterior view than we formerly did from the lateral view.

CARDIOSPASM*

PAUL H. POWER, M. D., Pine Bluff

There is quite a variance of opinion as to what the term "Cardiospasm" includes, or as to the proper term to use in describing the obstruction that takes place at the lower end of the esophagus.

Abt and his co-workers state that the primary factor in this condition is the spasm of the cardia. Whether this is of greater significance than dilatation of the esophagus is questionable. This condition is spoken of by some writers as an idiopathic dilatation of the esophagus, while still others have demonstrated clinically and anatomically that the constriction does not take place due to the action of the esophagus itself but due to pressure from without. If this be true, then the term "cardiospasm" is a misnomer.

Jackson has included this condition under the term "phrenospasm" and has demonstrated that the constriction normally present at the lower end of the esophagus (which prevents the regurgitation of food when the body is inverted) is due to a pinch-cock action of the diaphragm and that this constriction fails to open on the approach of food because of a dis-association of the reflex mechanism of swallowing. To this adherent action of a normal function, he has applied the term "phrenospasm" (as given in a paper on this term by Tyson of Philadelphia, with a case report). Griffith describes this condition as analogous to the pylorospasm of this period of life and describes it as a spasm of the esophagus, and I think with propriety.

This disease is probably much more frequent than ordinarily supposed and is one of the possible causes of uncontrollable vomiting

in infancy and early childhood. I am quite sure it is often mistaken for pyloric spasm or pyloric stenosis, as I did in the case I am reporting.

The pathogenesis of cardiospasm is not well understood, however, Abt divides the causes into five groups according to Held, and Cress. First, those patients whose nervous system is below par through inheritance. The case reported here would come partially under this heading, since the mother of the child is extremely nervous. Freund reports a case in a child two and one-half years old due to hysteria. Second, those individuals we would classify as subjects of status lymphicus, or status asthenicus—such cases as these due to gastropnoia and those of some psychic weakness—Freund's case. Third, those cases due to reflex irritation from some other organs, such as the stomach, gall-bladder, etc. Fourth, those due to infections or toxic metabolism. Fifth, those due to local erosion of the esophagus. I believe, too, that there is a congenital factor ever present, as most adult cases give a history of some trouble since the early months of life. This is corroborated by the case reported by Tyson, coming on the second day of life, and the case reported here, the symptoms beginning the third month.

This condition is a rare one in infancy and childhood, as far as case reports have been made. Tyson reports one in a new born; Baek reports one, an infant three months old; Goffert, in one four months; Bruce recently reported one in a child three years.

The principal symptom is the vomiting of food immediately after swallowing, which is accompanied with regurgitation and reswallowing. This disturbance of swallowing is probably due to failure of the normal automatic relaxation which takes place during the act of deglutition, as described by Jackson. On account of the continual reswallowing this condition may be confused with rumination, but can readily be differentiated, as there is no difficulty attending the latter, and the vomitus in the first has not been acted upon by the gastric juices. From pyloric stenosis and spasm it may be differentiated by passing a small catheter thru the esophagus into the stomach. The catheter will meet an obstruction at the cardiac orifice and food passed through the catheter into the stomach is not vomited. Then the roentgen-ray shows a constriction of the esophagus at or just above the cardia with dilatation of the esophagus above

*Read before the 52nd Annual Meeting of the Arkansas Medical Society, held in Little Rock, May 11, 12, 13, 1927.

in long standing cases. In older children-esophageal dilatation will have to be differentiated, which is done by the passage of sounds. x-ray and of the esophagoscope under experienced hands.

A very prominent physical sign in these cases is the absence or delay of normal gurgling following the act of swallowing heard on auscultation at the lower end of the sternum.

As a rule very little pathology is found. There may be hypertrophy of the esophageal wall above the constriction, with atony of the mucosa, resulting in dilatation.

Case Report, first child.

Baby J., was born September 10, 1925, full term, normal delivery, good condition at birth. Birth weight six and one-half pounds, breast fed up to present time, irregular nursing. Was first seen in my office August 21, 1926, at 11 months of age.

C. C. vomiting of food immediately after eating; loss of weight and high fever.

F. H. negative, except of mother's extreme nervousness and maternal grandmother's blindness (very suggestive of lues). Mother was 32 years of age when child was born. Present illness begun at age of three months, was perfectly normal baby up to this time; weight being 17 pounds. Begun with occasional regurgitation of food, which gradually increased until child was vomiting immediately after nursing, and begun losing weight. In June, 1926, the mother first consulted a physician, child then weighed eleven pounds, and was having fever (the reason for consulting physician).

The baby was put on artificial feeding at that time, but continued to vomit and lose weight. When seen by me baby was vomiting after every nursing and reswallowing alternately afterwards. Physical examination revealed a very poorly nourished and emaciated baby, almost of the marasmic type, with marked signs of rickets, and dehydration. Abdomen was soft and flabby, no palpable masses about the pylorus. No visible peristalsis. Primary diagnosis of pyloric stenosis was made. Child was put on atropine sulphate before feedings of Sauer's Paste, and lactic acid milk. On the following day the child had temperature 105 (due to dehydration, as P. examination otherwise negative) and had vomited every feeding. He was sent to the hospital and 250 c. c. saline was given intraperitoneally and 25 per cent solution dextrose was given by mouth along with breast milk. The child

continued to vomit the next day or so and I noted that the milk vomited did not look as though it had ever entered the stomach. An attempt at washing the stomach was made and the catheter would meet an obstruction which prevented the passage into the stomach. A. G. I. Series was immediately made which revealed a constriction of the esophagus just above the cardiac orifice, with marked dilatation of the esophagus above the constriction. The Roentgenologist gave us a diagnosis of a cardiospasm with dilatation of the esophagus, after mother had been questioned very closely as to the possibility of the child ever having swallowed a caustic of any kind. Large doses of atropine were then given by hypo, and a catheter was passed into the stomach, the stomach washed and several ounces of milk were given, which the child retained.

Atropine by hypo along with benzyl benzoate and feeding through the tube was continued for thirty days, then an occasional feeding by mouth was given until the child was taking all its food without any vomiting and with rapid gain in weight. Another G. I. series was run about eight weeks after the admission to hospital, which revealed the constriction and dilatation cleared up and the child was discharged, having gained nearly seven pounds.

This case was entirely lost sight of until about two months ago, when I decided to report it, and wanted some more pictures to corroborate a cure. After quite a search I located the child and found her in about the same condition as when first seen by me. The mother states that up until about one month ago the child had continued to gain in weight, having weighed nineteen and one-half pounds and on cutting the last of her temporary teeth she begun vomiting and losing weight and on readmission weighed thirteen pounds. Another G. I. series revealed the same condition as previously described and on the same treatment as previously outlined she is now doing nicely. At the present time her weight is eighteen pounds.

This proves the recurrence of this condition, if for any reason the child's general resistance becomes lowered, resulting in a lowered nervous tolerance.

BIBLIOGRAPHY

- Griffith's and Mitchell's Pediatrics.
- Abt's System of Pediatrics.
- Osler and McRae's Modern Medicine.
- Tyson's Phrenospasm.
- Archives of Pediatrics, December, 1926.

DISCUSSION

DR. W. T. FIKE, Warren: Was there any vomiting before the child was eleven years old?

DR. POWER: Yes. Vomiting began at three months.

INTERNATIONAL HEALTH BOARD

Although engaged in many activities on all the continents, and extending its work to the remotest corners of the globe, the International Health Board of the Rockefeller Foundation has maintained a definite and clear-cut policy from which it has not wavered, namely, that its function shall be to promote public health and prevention of disease by assisting governments in the development of their own official public health agencies. There are two chief methods by means of which the Board contributes to the advancement of disease prevention and the betterment of the health of nations: (1) aid to official public health organizations in the development of administrative measures suited to local customs, needs, traditions and conditions; (2) field research in the epidemiology of disease, thus making possible the application of advanced scientific knowledge in the development of an administrative program.

The disease that the Board has chosen for special attention have been world-wide in their distribution and of great economic importance. Field research in the epidemiology of hookworm disease has advanced knowledge concerning the life history of the hookworm, both in its free-living larval form and in its adult relationship to the host, so that we now have a much better understanding of the disease. This knowledge has enabled governmental agencies to delimit the field of control work and to modify the methods of treatment and of prevention to such an extent that the former administrative methods of control have been revolutionized. The results have been extraordinarily successful. At the present time it is fair to say that hookworm disease has almost disappeared from the United States and is rapidly coming under control in many parts of the world. But the great achievement is not the social and economic rehabilitation of the more than six or seven million people who have been treated for the disease during the past ten or fifteen years; it is the development of administrative measures that will prevent millions yet unborn from ever

suffering from its ravages.—Thirteenth Annual Report.

PROGRESSIVE POLYGAMY

Is there usually a medical aspect in divorces? Psychoanalysis say that sex enters into the majority of abnormal mental states, but that the conscious idea of sex is suppressed and appears in other forms such as love and dress display, or of applause, or notoriety.

Two questions arise regarding the relation of physicians to the prevention of divorce:

First, can the premonitory signs of impending separations be diagnosed?

Second, can a physician give effective treatment to a quarrelling man and wife?

The public discussion of the prevention of divorces has been carried on principally by sociologists and church leaders, and comparatively little is said regarding the medical phases of the problem. An editorial writer in the New York Herald-Tribune of July 26, says:

"Dr. Stetson of Trinity Church has given a damning name to the practice of serial marriages and divorces which has grown under legal and even social sanction. He calls it 'progressive polygamy,' which he things 'more menacing to society' than 'the legalized polygamy of the East,' which the Bishop of New York has been loud in condemning in Turkey, though legal sanction for it has there been withdrawn. The legalized polygamy of the East has at least not left childhood without a home. That is more than can be said for serial rather than synchronous polygamy. When one in every six marriages is ended by divorce and divorce means in most cases wreckage of the home, it is difficult to over-estimate the menace to the oncoming generation."

The editorial quotes Dr. Stetson's belief that laws are powerless to prevent divorces, but that "If the churches stood aggressively together in this view of their responsibility they should be able to quicken such a sentiment in support of our traditional respect for the institution of marriage as would protect it even against the 'progressive polygamy' which certain States not only tolerate but encourage. They might even aid by refusing, as Dr. Stetson suggests, to let their sanctuaries be used for the ostentatious and vulgar celebration of a sordid relationship which to all intents and purposes is pagan.—N. Y. State Journal of Medicine.

THE JOURNAL
OF THE
ARKANSAS MEDICAL SOCIETY

Owned by the Arkansas Medical Society and Published
under the direction of the Council.

WILLIAM R. BATHURST, Editor
810-812 Boyle Building, Little Rock, Arkansas.

Published Monthly. Subscription \$3.00 per year; single
copies 25 cents.

Entered as second-class matter, June 21, 1906, at the
postoffice at Little Rock, Arkansas, under the Act of
Congress of March 3, 1879.

Acceptance for mailing at special rate of postage pro-
vided for in Section 1103, Act of October 3, 1917, autho-
rized August 1, 1918.

The advertising policy of this Journal is governed by
the rules of the Council on Pharmacy and Chemistry of
the American Medical Association.

All communications of this Journal must be made to it
exclusively. Communications and items of general inter-
est to the profession are invited from all over the State.
Notice of deaths, removals from the state, changes of
location, etc., are requested.

OFFICERS OF THE ARKANSAS MEDICAL SOCIETY

HENRY THIBAUT, President.....	Scott
R. H. T. MANN, President-Elect.....	Texarkana
HOMER SCOTT, First Vice-President.....	Little Rock
J. B. WHARTON, Second Vice-President.....	El Dorado
O. J. T. JOHNSTON, Third Vice-President.....	Batesville
R. J. CALCOTE, Treasurer.....	Little Rock
Wm. R. BATHURST, Secretary.....	Little Rock

COUNCILORS

First District—W. W. VERSER.....	Harrisburg
Second District—J. L. JONES.....	Searcy
Third District—M. C. JOHN.....	Stuttgart
Fourth District—W. T. LOWE.....	Pine Bluff
Fifth District—L. L. PURIFOY.....	El Dorado
Sixth District—B. C. MIDDLETON.....	Texarkana
Seventh District—DEWELL GANN, SR.....	Benton
Eighth District—A. WATKINS.....	Little Rock
Ninth District—SAM G. DANIEL.....	Marshall
Tenth District—THOMAS DOUGLASS.....	Ozark

The man who tries to point out the right
way to others gets the direction a little better
himself.—*The Churchman*.

One of our friends told us the other day that
after his little niece had finished her prayers
at her mother's knee one night, she looked up
and asked, "Mamma, why don't we some-
times say 'A-ladies' instead of 'A-men'?"

This reminds us of the uncomfortable feel-
ing we always have when at Lenten services
we use the Litany with its petition, "That it
may please Thee to have mercy upon all men."

—*The Southwestern Episcopalian*.

Editorial

PRO AND CON

September days are school days. Medical
education has been a much discussed subject
of recent years, and like all progressive move-
ments still seems to be in a state of chaos. Re-
ports of the Council on Medical Education,
Medical Licensure and Hospitals show a wide
diversity of opinion among the members of
this body, yet its chief aims are fairly well de-
fined. First, it is attempting to provide an
adequate course of instruction for general
practitioners based upon broad foundations.
Secondly, it is trying to correlate the work of
the university and the medical school. Its
third object is to shorten the time required to
obtain a medical education. Supplementing
these objectives, the Council is trying to sup-
ply instruction in the specialties so that
specialists may be developed.

The difficulties that beset the Council are
many. One is the problem of secondary edu-
cation, or rather the preliminary education.
Students in many instances have not re-
ceived the type of mental training that is
necessary for the fullest insight to their med-
ical studies. In the effort to shorten the course,
some schools have set forth certain pre-medical
requirements in the basic sciences of chemis-
try, physics and biology. While these are of
fundamental importance, there is the danger
that other fully as important subjects may be
given superficial attention. The so-called cul-
tural studies should not be neglected. Every
medical student should have some knowledge
of the classics, of the elements of modern
languages, of history, and philosophy. These
all help in the moulding of ideals, and surely
every medical student must have the highest
of ideals in entering the profession of med-
icine.

The doctor in his community is an outstand-
ing figure. He not only is the medical ad-
visor, but consciously or unconsciously he is
a molder of public opinion, a moral force. By
maintaining high standards in medical educa-
tion, the Council is discharging its duty to
the public and to the medical profession. We
are for the Council.

Doctor S. A. Petroff—and by the way, he
is not a Doctor of Medicine, but a Doctor of
Philosophy—is the Director of Research and
the Clinical Laboratory of the Trudeau Sana-

torium for Tuberculosis. He is a very careful worker, and in popular parlance, "knows his stuff." In an admirable article in a recent number of the Journal of the American Medical Association, he has covered the question of "Immunity in Tuberculosis," and discusses at length vaccination with living virulent, living avirulent, and dead bacilli of tuberculosis. He feels that an absolute immunity to tuberculosis is impractical and unnecessary, but that a relative immunity which can prevent an infection by a small number of organisms is sufficient. The vaccination by living organisms, both virulent and avirulent, is fraught with dangers that do not compensate for the immunity conferred. Dead tubercle bacilli, however, establish an immunity that is sufficient, and at the same time, there is no danger in the use of such material. He believes that dead bacilli or some of their derivatives can be safely and effectively used to immunize the human race against the scourge of tuberculosis.

This is a step forward, and it may not be long when tuberculosis may be placed in the classification of conquerable diseases along with typhoid, diphtheria and small-pox.

A note of warning is sounded in an article entitled Heart Lesions produced by deep X-Ray by F. W. Hartman, Adolph Bollinger, H. P. Doub, and F. Janney Smith in the Johns Hopkins Hospital Bulletin. These men have conducted an experimental and clinical study. In their experiments the unit of measurement was an exposure of fifteen minutes which they say approximates the human erythema dose. They used thirteen dogs and five sheep. Dosage in the sheep ranged from 120 to 280 minutes, in the dogs 75 to 280 minutes. The gross changes which are tabulated are as follows: Hydropericardium, hemorrhagic infiltration of the right auricle, particularly the right auricular appendage, more rarely thickening and hyalinization of the epicardium with hemorrhagic infiltration of the ventricular walls, and passive congestion of the viscera. Microscopic changes were found in the myocardium of both the auricles and the ventricles, and in the sheep the bundle of His was also affected. Electrocardiographic studies upon the dogs showed inverted T waves in certain leads, auricular flutter and fibrillation, paroxysmal tachycardia, and a slight prolongation of the P-R interval.

They cite three clinical cases in which x-ray treatment had been administered. The heart changes in these cases simulated those found in the experimental animals.

These studies add another mental hazard to the work of the roentgenologist. The advantages of treatment must be weighed against the possibilities of damage. While malignant tumors are the chief indication for x-ray therapy in the region of the heart, the susceptibility of cardiac structures to x-rays should be borne in mind, so that a favorable result may not be vitiated.—O. C. Melson, M. D., Little Rock.

Abstracts

VITAMIN REQUIREMENTS OF NURSING YOUNG

Barnett Sure, Fayetteville, Ark. (Journal A. M. A., Aug. 27, 1927), details experiments which show an unusual response of nursing young (*mus norvegicus-albinus*) to vitamin B administrations. He also suggests that a large proportion of the infant mortality during the first year of life which is associated with gastro-intestinal disturbances may be due to vitamin B deficiencies. Such vitamin deficiencies may be brought about by the character of the present American diet, which is composed largely of degerminated cereals, sugar and meat, and in addition by the inefficiency of the nursing mother to secrete her daily intake of vitamin B quantitatively and rapidly into the milk, which is indispensable for infant nutrition and welfare. While pediatricians already recognize the indispensability of the antirachitic and antiscorbutic vitamins for nursing infants, which is being furnished in the form of cod liver oil and orange or tomato juice, no provision is as yet being made for vitamin B therapy.

Liver Extracts in Anemia—The striking effect of feeding liver and certain preparations of liver on a number of physiological processes has been established. In the case of growing animals, it appears to promote rapid gains in size. The extraordinary effect of diets including liver on severe anemias of long standing in dogs has been shown. Vigorous regeneration of hemoglobin and red blood cells can be brought about by feeding the

hepatic tissue of various species, beef, pig, sheep, calf and chicken having been tested with unquestionable success. Striking effects have been obtained in pernicious anemia with diets containing large amounts of liver in one form or another. Studies undertaken to determine the constituents of liver which are effective in pernicious anemia have been made and potent concentrates have been obtained. (Journal A. M. A., August 13, 1927, p. 524).

Personal and News Items

Dr. and Mrs. J. E. McMahan of Conway recently visited in Little Rock and Memphis.

Dr. J. B. Dooley of Little Rock has moved to Compton, Calif.

The Southern Medical Association will meet in Memphis, November 14-17.

Dr. William H. Deaderick and son of Hot Springs, and Dr. and Mrs. H. H. Niehuss of El Dorado, were in Little Rock recently.

Dr. and Mrs. Loyd Thompson of Hot Springs have returned from an extended trip in the West.

Dr. H. Fay Jones and Dr. Paul Mahoney read papers, July 14, before the Pope County Society at Russellville.

Dr. A. B. Coon, Little Rock, has moved his office from the Home Insurance Building to the Donaghey Building.

Dr. Dewell Gann, Jr., Little Rock has returned from an extended sojourn in the mountains of Colorado.

We regret to announce the death of Dr. Henry Thibault's father, Mr. James K. Thibault, aged 72.

Dr. and Mrs. Geo. S. Brown and their son, of Conway, have returned from a motor trip through Northwest Arkansas and Oklahoma.

Dr. Wm. R. Bathurst, Little Rock, has returned from a two weeks vacation at Grand Haven, Michigan.

Dr. and Mrs. John P. Sheriff of Legels, visited in Hot Springs and Little Rock last month.

Dr. and Mrs. A. A. Hughes of Pine Bluff and Dr. and Mrs. W. T. Wootton of Hot Springs were among the recent visitors in Little Rock.

WANTED—Location to practice medicine where they have a good school and need a doctor. Address: Doctor, Box C, Pitman, Arkansas.

Dr. Morgan Smith announces the opening of offices in Suite 501 Hall Building, Little Rock, limiting his practice to consultation only, on diseases of children.

Dr. Paul Mahoney of Little Rock has just returned from New Orleans, having completed a six months course in the Charity Hospital Clinics.

Dr. and Mrs. J. P. Sheppard, Little Rock, have returned from a summer trip of two months along the Pacific Coast. They traveled in Canada and Alaska, spending some time at Banff and Lake Louise.

Dr. G. W. Reagan of Little Rock has returned from a post-graduate course in Urology at the Tulane University and the Mayo Clinics. Dr. Reagan's office is located at 509 Federal Bank Building.

Dr. W. F. Smith has moved his private office to 838-839 Donaghey Building, Little Rock. Dr. Smith is division surgeon, Missouri Pacific Hospital, Little Rock, a member of the staff of St. Vincent's Infirmary and the Baptist State Hospital. His practice is limited to surgery.

WANTED—Salaried appointments for Class A physicians in all branches of the medical profession. Let us put you in touch with the best man for your opening. Our nation-wide connections enable us to give superior service. Aznoe's National Physicians' Exchange, 30 North Michigan, Chicago. Established 1896. Member the Chicago Association of Commerce.—(Adv).

Colonel F. Vinsonhaler assisted by his daughter entertained the Medical officers and wives of Evacuation Hospital No. 24, U. S. Army Reserve, August 12, with dinner at the Shrine Country Club.

Colonel Vinsonhaler is relinquishing command of the Unit, after accepting the Dean-ship of the Medical School. He will be suc-

ceeded by Lieut. Colonel Homer Scott of Little Rock.

In the June 18th issue of the Journal of the American Medical Association, under the heading of New and Non-Official Remedies the acceptance of the Horlick Milk Modifier was announced. The product differs from the malt sugars in that it incorporates soluble and readily assimilable protein and valuable mineral salts from the grains. The Horlick firm points out this fact as a decided advantage for its product. Another point which is mentioned as an advantage in favor of the new product is the proportion of its two chief carbohydrates, maltose and dextrin, which are 63 per cent maltose and 19.5 dextrin.

Samples of the new product, literature concerning its use, prescription blanks and file cards giving methods of preparation are available for members of the medical profession and will be sent upon request. Address, Horlick's Milk Corporation, Racine, Wis.

THE AMERICAN COLLEGE OF SURGEONS

The American College of Surgeons will hold its seventeenth Clinical Congress in Detroit, October 3-7. The Hospital Standardization Conference will extend from Monday morning to Thursday afternoon and will include a discussion of hospital and nursing problems and hospital demonstrations. The program Monday evening will include an address of welcome by the local Chairman, the address of the retiring President, the inaugural address of the new President, and the John B. Murphy oration. Clinics in general surgery will be held in the Detroit hospitals every morning from Tuesday to Friday, and in Eye, Ear, Nose and Throat work the same afternoons. Clinics will also be held at University Hospital, Ann Arbor, Tuesday to Thursday. On Tuesday and Wednesday mornings and afternoons and on Wednesday morning, clinical demonstrations will be held at the Statler Hotel (mornings) and Orchestra Hall (afternoons). On Thursday afternoon the annual meeting of the Governors and Fellows will be followed by a cancer symposium. On Friday afternoon there will be a symposium on traumatic surgery, to be participated in by leaders in industry, labor, indemnity organizations and the medical profession. On Tuesday even-

ing the program will take the form of a celebration of the Lister Centennial. On Thursday evening there will be a large Community Health Meeting in the Masonic Temple, and on Friday evening the Annual Convocation of the College.

SOUTHERN MEDICAL ASSOCIATION, TWENTY-FIRST ANNUAL MEETING, MEMPHIS, TENNESSEE, NOVEMBER 14-17, 1927

After ten years the Association meets again in the "Queen City of the Valley" for its annual convocation. Four days of scientific treat—two days devoted to clinical sessions and two to section meetings—the same general plan as was so successfully carried out at the last annual meeting. Memphis with its large and progressive profession, its medical school and numerous hospitals, insures the best of clinical facilities for the clinic sessions.

Every physician of the South who is a member of his State and county medical society and who is forward looking—who wants to keep abreast of the times in medicine—can ill afford to miss this great gathering of physicians. No phase of medicine and surgery will fail to be presented at this meeting. The entertainment will be such as to delight all who come. Among outdoor entertainments will be golf and trap shooting.

Memphis has the most modern and complete convention Auditorium in the whole South and the greater part of the convention activities can be held under one roof. Being centrally located and with splendid railroad facilities, it is easily reached from all parts of the South; and its extraordinary hotels assure comfortable accommodations for all.

Note the place and the time—Memphis, November 14-17—and begin making plans accordingly.

THOUGHTS

At no great department store can one secure so much to satisfy one's needs as at the little shop of contentment.

—*The Churchman.*

Someone reports that Dean Inge received a cable from an American publisher: "Will you write your life? Will pay \$10,000." On his refusal, a second cable followed. "Will you write life of Christ? Lower rates, of course."—*The Churchman.*

Obituary

STEVENS, CORBIN D.—Dr. C. D. Stevens of Magnolia, died August 4, 1927, aged 55. He had been a practicing physician in Magnolia for the last 26 years. Surviving are his wife and seven children, Alvin, an attorney of El Dorado; Marvin of Little Rock; C. D., Jr., Misses Jewel, Clara, Birdie Mae and Mrs. Ves Godley all of Magnolia.

GRANBERRY, GEORGE W.—Dr. G. W. Granberry, Civil War and Spanish-American War veteran and pioneer resident of Cabot, Lonoke County, died August 9, 1927. Aged 78.

At the age of 14, he entered the Confederate army and served until the end of the war. He later graduated from the Memphis Hospital College of Medicine and practiced in Arkansas from 1882 until a few years ago when he retired. He volunteered for service during the Spanish American War and served as Captain of Company C, Second Arkansas Volunteer Infantry.

He is survived by three sons, Maj. B. F. Granberry, retired Army Officer, and Dr. G. W. Granberry, Jr., both of Cabot, and W. D. Granberry of Grapeland, Texas; two daughters, Mrs. M. L. Shofner of El Dorado, and Mrs. S. W. Whitthorn of St. Augustine, Fla.

DALE, JOHN RICHARD—Dr. John R. Dale of Texarkana, died at his summer home at Caddo Gap, August 25, 1927. Aged 77.

Dr. Dale was born in Mississippi, where he began the practice of medicine and gained considerable fame as a successful practitioner during an epidemic of yellow fever. He moved to Arkansas and located in Arkadelphia in 1880, removing to Texarkana in 1906. Surviving are his wife, two sons, Dr. Rodney Dale and Dick Dale of Texarkana, and two daughters, Miss Lois Dale, and Miss Christine Dale a missionary.

HARRIS, ROBERT LEE—Dr. R. L. Harris of Hope died September 8, 1927. Aged 53. He was born in Cobb County, Georgia, moving to Arkansas with his parents in 1884. He was graduated from Medical College in Little Rock in 1907, practicing in that city

for several years following his graduation. He then moved to Blevins, and in 1923 moved to Hope.

Dr. Harris is survived by his wife, one son, Robert, two daughters, Ruth and Mildred, and by five brothers, Rev. J. G. Harris and Earl Harris of Smackover; Henry Harris of Little Rock; Dr. E. S. Harris of Coy, and Homer Harris of Belton.

County Societies

MISSISSIPPI COUNTY

(Reported by F. D. SMITH, Sec.)

The Mississippi County Medical Society met in regular session at Osceola, Tuesday, August 9, 1927.

Present: Hill, Saliba, Usrey and Smith of Blytheville; Harwell, Sheddan and Massey of Osceola; Hudson of Luxora; Ellis of Wilson; Hosey of Joiner. Visitors were: W. W. Verser, District Councilor of Harrisburg; J. A. Crisler, Sr., Henry Hill, H. G. Rudner, Eustace Semmes, and Russell Hennessey of Memphis.

Dr. Crisler gave an interesting discourse on "Goiter," and Dr. Rudner discussed "Headaches." Drs. Hill, Semmes and Hennessey made impromptu talks on subjects relative to their specialties.

The next meeting will be at Blytheville, the second Tuesday in September.

OUACHITA COUNTY

(Reported by J. S. RHINEHART)

The Ouachita County Medical Society met in regular session, September 1, 1927, in the dining room of the Orlando Hotel at Camden. The President, J. S. Thompson, presided over the meeting, which opened with a banquet.

The following dentists were special guests: Ed. L. Watson, S. A. Savers, F. W. Dietrich of Camden, and Whipple of Stephens. Dr. Watson read an interesting paper on "Pyorrhea," after which followed a discussion led by Dr. Dietrich.

Dr. G. P. Sanders, Stephens, presented a report of a case of "Knee-joint Infection."

Miss Gilberta Harris of the Camden Hospital, was a guest of the Society and gave a most interesting address on "Observation in Korea."

The Society will meet with the Tri-County Medical Society, which will be entertained October 4, in Magnolia, by the Columbia County Society.

DESHA COUNTY

(Reported by W. B. GRAYSON, Sec.)

The regular meeting of the Desha County Medical Society was held Tuesday night, August 16, at McGehee.

Present: Isom, Watts, Biscoe of Dumas; Applewhite of Watson; McCammon of Arkansas City; Kimbro of Tillar; White, Chenault, Smith, DeClark, Grayson of McGehee. Dr. J. H. Turner, Dentist, of McGehee was a visitor.

Dr. J. C. Chenault was the principal essayist of the evening. His paper was entitled: "Some Aspects of Abnormal Obstetrics." The discussion was opened by Dr. White.

Dr. DeClark gave a report of a case of hemorrhage of the bowels in an infant ten months old, which proved to be intussusception. Dr. Isom discussed surgical interference in such cases.

Dr. Smith reported a recent case of unusually low pulse rate.

This was the first meeting of the Society since the recent overflow, and a general discussion of the part the doctors played, in this locality, was entered into. It was concluded that practically every person in this territory was inoculated for typhoid, and a great many were vaccinated for smallpox.

The next meeting will be held at McGehee, September 20.

Essayist will be Dr. DeClark of McGehee. Subject: "Infections of the Intestinal Tract of Babies." Discussion to be opened by Dr. Grayson.

Book Reviews

The Practice of Medicine.—By A. A. Stevens, M. D., Professor of Applied Therapeutics in the University of Pennsylvania. Second Edition, entirely reset. Octavo of 1,174 pages. Published by W. B. Saunders Company, 1926. Cloth, \$7.50 net.

The author of this book gives descriptions of internal diseases in accord with the present state of our knowledge, and the necessary points in pathology, diagnosis and treatment.

In this new edition he has rewritten several chapters and much new matter has been added.

International Clinics.—A Quarterly of Illustrated Clinical Lectures and Especially Prepared Original Articles by Leading Members of the Medical Profession Throughout the World. Volume IV. Thirty-Sixth Series, 1926. Published by J. B. Lippincott Company, Philadelphia.

Among the usual number of interesting clinics in this issue, we have read with interest the "Practical Notes on Neurotherapy" by O. Veraguth, and quote the following interesting paragraphs:

"The first task of the treatment in every case of inflammation is always the attempt to introduce antitoxic influences as soon as possible. It is still a question to be settled whether we do that by stimulating the defensive forces of the diseased organism itself or by killing the noxious germs when treating the syphilitic nervous system with mercury and arsenic compounds.

"All over the world the interest is keen on the question of the results after malarial treatment of general paralysis, an attempt that also belongs to the category of antitoxic influence. Many statistics show satisfactory results of such treatment even in so desolate a disease as general paralysis. So we may hope that perhaps other inflammatory processes, such as disseminated sclerosis, might some day also be favorably influenced by an analogous or the same treatment.

A PRACTICAL PRAYER

The following conversation between a surgeon and a negro woman patient that recently took place in a Shreveport sanitarium, is given here verbatim, as reported in the Shreveport (La.) Times:

Question—"Dr. H., is you a church member?"

Answer—"Yes."

Q.—"What Church does you belong to?"

A.—"Baptist."

Q.—"Ise a Baptist, too. Doctor, can I pray?"

A.—"Yes."

Q. "I'se gwine to pray out loud."

A.—"Go to it."

"Lawd, this is Tildie. I'se in de sanitarium on de foth floor, up in de op'ratin' room; gwine to be op'rated on. Dr. H. he's gwine op'rate on me. I h'ar he's a good doctor an' I trust him—but, Lawd, I wants you here to strengthen his knees and for Christ's sake guide de hand that holds de knife. Ahmen."

—The Churchman.

THE JOURNAL

OF THE Arkansas Medical Society

PUBLISHED MONTHLY UNDER THE DIRECTION OF THE COUNCIL

Vol. XXIV

LITTLE ROCK, ARK., OCTOBER, 1927

No. 5

Original Articles

"INTESTINAL MYIASIS"*

With Report of Cases

A. A. BLAIR, M. D., Fort Smith

In reviewing the literature on human myiasis I find an abundance of material lacking, particularly regarding infestation of the gastrointestinal tract. Am not prepared to say whether this is due to reluctance in reporting these cases because of its transient or benign character, or rather its infrequent occurrence. Dipterous larvae, however, evidently play a much more important role as parasites of man than is generally supposed (1). Cutaneous myiasis in man is frequently met with in neglected wounds; may occur primarily from invasion of hypodermis bovis, in which case the cycle of development is the same as in lower animals, (2) cows, sheep, etc. These frequently produce furuncular tumors (3). Rhinal myiasis may result from deposits of egg in the nostril with the invasion of the larvae into the sinuses, causing serious or fatal termination (4). That we have a dipterous larvae recovered in the feces occasionally in people who experience few symptoms other than mental hazards, but no loss in time from work, would tend to show the benign nature of this disease.

The two cases I have observed in the past two years, the larvae spontaneously disappear after taking magnesium sulphate apparently to reappear only after being reinfested. This conclusion was arrived at due to the intervals in which the patients were free from larvae and symptoms during summer months and entire absence of clinical evidence during the winter. That the ova are ingested while eating contaminated food is a pretty well established

fact. Eating the larvae, however, has been suspected by some authorities. Just how long the larvae are able to remain in the gastrointestinal tract in a retarded state of development cannot be definitely proven. One of these cases passed larvae several weeks after removing residence to another State. McCampbell and Corper (5) state that larvae may remain in the gastrointestinal tract for several years if undisturbed. A survey of the disease seems to show individuals affected whose sanitary habits and surroundings are below par, and that these patients are apparently cured after thorough elimination with saline cathartics. No other treatment seems necessary.

The first case referred to our Clinic two years ago, a young man 28 years old, from Springdale, Arkansas, complained of attacks of mild gastrointestinal disturbance as periodic attacks of abdominal cramps with a few soft, mushy, sour stools in which he passed large numbers of larvae, said that he had noticed these two years only during late spring and summer months, particularly during berry season. He was in the habit of eating quantities of berries, to which he attributed his trouble. These larvae were 2 to 3 mm. long, white, anterior end pointed, were examined in our laboratory and some also sent to Doctor C. C. Bass of New Orleans, for identification. His report was that they were larvae of a dipterous fly, but not classified. These grossly resembled those in every respect recovered from the second case, of which a detailed report follows:

Case No. 2. Male, age 24; native of Arkansas; resides in the suburbs of Fort Smith; married four years; father of one child; had typhoid in early life, otherwise has been in good health until four or five years ago when he developed urinary frequency, hematuria, periodic chills and fever; later had left kidney removed for a pyelonephrosis (1924). The

*Read before the Fifty-Second Annual Session of the Arkansas Medical Society, Little Rock, May 11-13, 1927.

following summer in July, 1925, he developed some gastrointestinal uneasiness, noticed a rolling motion in bowels, occasional cramps and a sensation of a crawling and itching feeling in the rectum, particularly at night, and a desire to evacuate his bowels. This went on some time before he examined his stools. On close examination he found large numbers of small, white, pointed maggots. He was then having one to three mushy stools a day for several days in succession, at which time he was usually able to recover the larvae, then a period of improvement. This continued periodically until September, at which time he improved without consulting a physician. As his trouble reappeared in July, 1926, he came in for examination. At that time he brought in a fresh stool containing numerous larvae. Some of these were sent to the Army Medical Museum, Department of Entomology, Washington, D. C. Major George R. Callendar and C. T. Green identified these as being larvae of *sarcophaga hemorrhoidalis* (Fallen). This patient lived in a five room house, poorly screened, outhouse fifty yards to the rear; drank water from an open well; had a truck patch in which he always had abundance of strawberries, blackberries and tomatoes which he would frequently go out and eat fresh from the vines. He ate quite a little meats well cooked, but not in habit of eating cold left-over food. His wife and young child had never had his complaint and had never seen any larvae in their stools. In August, 1926, this patient removed to Oklahoma. Six weeks later he had some disturbance at which time he passed a large quantity of larvae, but after proper catharsis has not passed any since and at this time seems to be in the best of health. This case is being held under observation for the recurrence of his trouble this spring and summer.

Conclusion: We were not able to determine the source of these patient's infestation, but the history of the sarcophagine fly shows that they will frequently deposit their eggs on fruit and vegetables. Most likely they ate the fly ova or larvae on over-ripe berries or tomatoes, as the second patient particularly had a habit of going out each afternoon and eating ripe tomatoes from the vine. It would appear that he kept reinfecting himself. On the contrary no other member of either family contracted this illness. These patients were

free of larvae and all symptoms during the winter months after saline catharsis would tend to show that these parasites were not harbored in the intestinal tract from one summer to the other.

BIBLIOGRAPHY

- (1) *Sarcophaga Hemorrhoidalis* Larvae as parasites of the Human Intestines (Dipt.). By L. Haseman, Columbia, Mo.
- (2) Case of Human Myiasis caused by the Ox Warble, *Hypoderma Bovis* De G., by W. B. Herms, University of California. *J. Parasitology* Mch., 1925.
- (3) Skin Myiasis. L. Rihadeau-Dumas & Larousse. P. 750. *Bul. de La Societe Medicale des Hopitaux*, Paris.
- (4) An Unusual Case of Rhinal Myiasis with Recovery. O Jason Dixon, M. D., Kansas City, Mo. *J. A. M. A.*, Oct. 25, 1924.
- (5) McCampbell & Corper. Myiasis Intestinalis due to infection with three species of dipterous larva. *From Patho. Lab. Univ. of Chi.*

DISCUSSION

DR. H. THIBAUT, Scott: There are two points in connection with fly larvae in the intestinal tract that I would like to mention in connection with Dr. Blair's paper. I had two or three patients last summer that reported to me that they passed a vast number of maggots in the stools. These patients were working where there were no toilet conveniences and they passed these stools out of doors, and noticed the presence of maggots. It turned out that the maggots were deposited on the stools by a viviparous fly and they didn't have intestinal myiasis at all.

Adaptation is necessary for these parasites to live through the intestinal tract. Those that are fortunate enough to do that generally belong either to the rat-tail larvae or some of the flesh flies. They have acquired the property of developing to the pupal stage or an approach to the pupal stage in the intestinal tract of warm-blooded animals and most of them that persist in that stage belong to those groups.

A very simple way to classify these flies is, when the patient passes a full-grown larva, to put a part of the stools in an ordinary fruit jar with some dirt and they will pupate and finally hatch out and you will have an adult fly. You then have an easy method of identification which I think is considerably easier than trying to classify closely allied maggots. To use a slang expression, when you get to examining them, "all maggots look alike to you" more or less and it is pretty hard to tell them apart. Whereas, in the adult fly, the distinction is so great that anybody can tell them, and you can classify them a good deal easier and more work has been done in separating them than if you had to deal with the maggots.

There is another form of intestinal myiasis that I have noticed, which is the accidental form. A patient with an intestinal fistula very often has accidental fly blows deposited on the external wound and these maggots may migrate into the intestinal tract and produce diseases there, when their primary intention was simply to invade the patient on the external wound.

THE DEVELOPMENT OF PREVENTIVE MEDICINE*

With a Brief Discussion of some of the Activities of an Official County Health Department.

F. MICHAEL SMITH, M. D., Pine Bluff

An hour, or a day, if filled with worthwhile service, or animated by exhilarating recreation is soon past; but if the "tick-tock" of the cogs that mark the passing of time are impatiently heard, or the dial of the time-piece idly watched, the moments seem days, and days seem years.

A hundred years, considered from individual experience however employed, is a long while; but as a period in the eons of time, its duration is infinitesimally short. This hour, this day, and this century in which we have been permitted to serve and play, to act and observe should seem the shortest of any similar period in the world's history, because it has been so completely filled with such marvelous achievements in science, agriculture, industries, etc.

Earnest and erudite workers in the various branches of science, as chemistry, biology, physics, have contributed so much to our knowledge on these subjects and so much has been successfully applied to the various industries of our day, that the results are overwhelming and incomparable to achievements of any other equal period of the world's history. In the discovery and beneficial application of demonstrable truths and verified laws, that have existed, though undiscovered, from the period when order supplanted chaos in the universe, medicine has not been excelled by any other branch of science. Nor has any other branch in this century contributed more to the sum total of what we are pleased to term progress.

Medicine has made such rapid strides in its accumulated knowledge and in its service to mankind that in this century we note a high degree of specialization among students and practitioners.

Preventive medicine and psychiatry are the more recent branches of medicine that have had intensive study and in which specializa-

tion is quite frequently made. However, in the great fight that medicine is carrying on, and has carried on, against disease and the prevention of same, no specialty alone can claim all honors, for each has done no little part. The doctor of the interior, exposed to heat and cold, surmounting the difficulties of impassable roads, the surgeon at the operating table, the obstetrician, the gynecologist, the pediatrician, laryngologist, optician, x-ray technician, laboratory worker, etc., all have contributed to the alleviation of the sorrow and suffering of humanity, the conservation of life, the preservation of health and the eradication of disease.

Preventive medicine, as specially applied through our health departments, cannot claim, and will not claim, all honor for eradication of disease, nor the increasing longevity of man, but through intensive study of means and methods of prevention, by specialization in the application of known truths it will more effectually contribute to the sum total of service that medicine in all its branches will bestow upon the people of earth. Neither do health departments directed and operated by a specially trained personnel delegate to themselves all the honor or credit for the many successful health projects that have been accomplished, nor credit for the entire initiative into all the fields of activity wherein they now serve.

In the early days a Health Department, or health officer functioned little other than to maintain a strict quarantine over virulently contagious diseases, and perhaps to correct many of the outstanding nuisances as the disposal of putrefying carcasses, ordering removal of unsightly rubbish, cleaning vacant lots of weeds, tin cans, etc. Many of these activities, we regret to state, in the light of modern sanitary teachings were of little, if any, avail in abating or preventing sickness. But with the passing of the years bacteriology through the labors of the masters gave to medicine and the world authentic proof of the causative factors of many diseases such as yellow fever, cholera, malaria, pellagra, and isolated the pathogens of typhoid, diphtheria, tuberculosis, syphilis, meningitis, gonorrhea, pneumonia, scarlet fever, influenza, etc. and forever dispelled the mysteries and morbid fancies that had hitherto possessed the medical as well as the lay mind. Theories

*Read before the 52nd Annual Meeting of the Arkansas Medical Society, held in Little Rock, May 11, 12, 13, 1927.

of miasma, foul air, witchcraft, Hoodoos, offended divinities, fomites, etc. as causative factors of disease gradually gave way to the authentic teachings of scientific medicine. Preventive medicine broadened its field of activities and health departments co-operating with the medical profession and directed by medical men have applied this knowledge in such a way as to be partially instrumental in greatly reducing morbidity and mortality and eradicating or holding in check scourges that formerly decimated the race. However, in these labors that have meant so much to mankind, environmental and physical, industrial and social, there are factors other than the individual contributions of the medical man, official agencies, or health departments; known as voluntary agencies. These have contributed no little part in the progress that has been made, and will continue to exercise as a potent factor in health work. Tennyson said, "Through the ages one increasing purpose runs and the thoughts of men are broadening with the process of the sun." So when bacteriology gave to the world the irrefutable proof of the cause of many diseases, and medical science pointed out the only rational methods of cure and prevention, the humanitarian heart of many men and women were moved to throw their strength of mind and their financial resources into the fight to liberate the race from the Hydra-headed monster, preventable disease, that was destroying and devitalizing the race. So we see the organization of the National Tuberculosis Association, the American Public Health Association, the American Child Health Association, the American Red Cross Association, the National Society for Control of Cancer, the National Society for Crippled Children, etc., an almost innumerable number. These voluntary agencies, as I understand same, are financed by voluntary or solicited contribution. However, an approach to a co-ordination of efforts of the various voluntary, and at times official agencies was in the health center wherein all were domiciled at one place having the same headquarters and perhaps assigning certain works or allotments to each agency, a plan that perhaps has been fairly successful and effectual.

The county health unit, or county health department, originated after repeated conferences of various State health officers with

certain officials of the U. S. Public Health Service, who suggested that surveys be made of needs for rural sanitation. As a result of these surveys Yakima County, Washington, in 1911, put on the first full time county health work. Other surveys were made and other county health departments were organized in several States until at present there are between three and four hundred full-time county health units or departments in America. The present plan for organization most generally accepted is that the municipalities, county and city school boards, State Board of Health, I. H. B. and U. S. P. H. Service, become the active co-operating agencies in the health unit, that voluntary agencies could assist in securing appropriations, themselves make financial contributions, give moral support to all projects undertaken, but that the personnel of the co-operating agencies be official bodies, and that the personnel of the health unit should be a trained corps consisting of inspectors, nurses, physicians, etc.; that the director should be the legal health officer and through this kind of an organization public health work would be done by an official agency, or organization, that could be fostered by organized medicine as well as the private doctor, and that the co-operation should follow. In this way the highest basis of efficiency would be attained, inasmuch as this health unit would be supervised by a State Board of Health, assisted by a local board of health and with the consent of the State board, the U. S. Public Health Service could advise and loan its specialists and trained assistants, physicians, sanitary engineers, inspectors, etc., in working out certain health projects and problems; as the personnel of the unit is composed of nurses, inspectors, doctors, etc., directed by medical men who are expected and required to maintain the accepted ethics of their profession in the legitimate field, preventive medicine, or branch of medicine, they have chosen to practice.

This brings us to the consideration of some of the duties of a health department, or county health unit, and the scope of its endeavors.

SCOPE OF THE ACTIVITIES OF THE COUNTY HEALTH DEPARTMENT OR HEALTH UNIT

1. Educational:

- (a) Lectures.
- (b) Bulletins Distributed.

- (c) Newspaper Articles.
 - (d) Circular Letters.
 - (e) Health Exhibits.
2. Sanitation:
 - (a) Private; Home.
 - (b) Public; Schools, Churches, Camps, Hotels, Factories, Public Buildings, etc.
 Water supply; screens, light and ventilation, location of buildings, disposal of human excreta, etc.
 3. Food Control:

Special inspection and supervision of food product places, dairies, pasteurizing plants, slaughter houses, meat markets, restaurants, cafes, lunch counters, ice cream and sausage factories, etc.
 4. Epidemiology:
 - A. Control of communicable diseases, cases carriers, contacts, quarantines, etc.
 - B. Venereal Disease Control:
 - (a) Suspects examined.
 - (b) Prophylactics (questionable).
 - (c) Treatment for rendering patient non-communicable.
 - C. Tuberculosis Control:
 - (a) Examinations.
 - (b) Placing in Institutions.
 - (c) Home Visits.
 5. Immunology:
 - (a) Antityphoid.
 - (b) Antismallpox.
 - (c) Antidiphtheria (toxin-antitoxin or annatoxin) (toxoid).
 - (d) Antirabic.
 - (e) Antitetanic.
 6. Child Hygiene and Maternity:
 - A. (a) Prenatal.
 - Examination.
 - Conferences.
 - Home visits by nurses.
 - (b) Infant and Preschool.
 - Examination.
 - Consultation with parents.
 - Home visits by nurses.
 - (c) School.
 - Examinations.
 - Consultation with parents.
 - Home visits by nurses.
 - Classes in Hygiene.
 - B. Nutritional Classes.
 - C. Corrective Measures.

Family physicians and dentists, hospital (pay or charity), dental clinics, surgical clinics, (free or pay) but all work done and fees charged are designated by the operating physician and dentist.
 - D. Supervision of Midwives.
 7. Laboratory:
 - (1) All specimens for diagnosis of communicable disease.
 - (2) Specimens for release of quarantine.
 - (3) Analysis of drinking water.
 - (4) Analysis of milk, bacteria content, etc.
 8. Antimalaria, Antimosquito:
 - (a) Inspections, survey.
 - (b) Drainage.
 - (c) Oiling, larvacides.
 - (d) Top minnows.
 - (e) Home control, screening, breeding places, etc.
 - (f) Carriers.
 9. Life Extension:
 10. Vital Statistics:
 - (a) Births.
 - Deaths.
 - Morbidity.
 - (b) Causes of Death.

By reference to the supplemental sheets you will observe that the activities of a county health department may be brought under ten major headings, namely: Education, Sanitation, Food Control, Epidemiology, Immunology, Child Hygiene and Maternity, Laboratory, Antimalarial, Life Extension and Vital Statistics. You will observe that there are subdivisions under practically every heading. There may be a necessity for other activities that are not listed here, but for all practical purposes, or rather for a working basis this outline is fairly comprehensive of a health department's field of activities. Few units are able to successfully carry on all these activities at once as a large personnel and sufficient funds would have to be available.

A detailed discussion of all these divisions and their respective subdivisions would necessitate a volume or volumes rather than a paper conforming to the time limits of your society, so briefly we will discuss only a few:

1. *Education*: An intensive and authentic educational program continuously, faith-

fully and courageously carried on by means of lectures, bulletins, newspaper articles, exhibits and the personal touch is found to be of inestimable value in the cause of public health and incidentally in the advancement of the medical art; for the fundamental principles on which medicine and surgery are based and upon which the healing art is made secure is, that there is a cause for every effect, an etiology precedes every pathology. Through the county health department these facts are constantly being instilled into the minds of the children of the land and into the minds of that great percentage of human beings who do not think deeply for themselves. This is the campaign of promise that bids fair to disconcert and rout the fakers of medicine, the cultist, the charlatans, nostrum venders, faith healers and pseudo science professors.

2. *Sanitation*: Sanitation of the home or public places has to do with the correct disposal of human excreta, the securing of wholesome water or protected water supply, proper light and ventilation, location, etc.

There are no greater factors in public health than these, especially the correct disposal of human excreta. The human organism has four principal avenues or routes for the disposal of waste matter from the body, viz: the bowel, the skin, the kidney, the lung and mucus membranes continuous therewith. The laboratory has repeatedly and irrefutably shown that exudates or secretions from these organs contain the viable and virulent pathogens of communicable diseases from which the host may be a sufferer. If these secretions, this human filth, if you will permit, can so be disposed of as never again to enter the body of other individuals, is kept out of drinking waters, milk and other foods, if soiled fingers, common drinking cups and other material objects do not convey it to the mouth of the thoughtless and untutored, the incidence of filth borne diseases will be greatly reduced. In the accomplishing of such a task, public health workers and departments of health feel they can render one of the greatest services to mankind.

3. *Food Control*: The health of the public should be protected by provisions for safe foods, as milk, meats, etc., which may in part be assured by the adoption and enforcement of model food ordinances, which require sani-

tary standards at the place of production, preparation, transportation, and dispensing of same, that all handlers of same be free of communicable diseases, and that all food, food product places, food depots, places where foods are prepared and served to the public, be regularly inspected by a competent inspector and his findings be transmitted in writing to the health department.

4. *Epidemiology*: Every health officer should be a ready and available consultant to every physician who might desire his opinion in cases of suspected communicable diseases, and it would be well if every health officer were a diagnostician of no mean ability in cases of infectious diseases, thoroughly conversant with the incubation periods, clinical symptoms, periods of infectivity, methods of spread and methods for control. Though the establishing and terminating of a quarantine may be entirely incumbent upon a health officer, however, the methods of quarantine are more or less routine, slight differences are found in different localities, as the method or routine of quarantine is determined by the regulations of the State Board of Health, local boards of health and city ordinances, so health officers of necessity are governed almost entirely by the requirements of State, county and city wherein they are exercising jurisdiction. Epidemiologic surveys to determine, if possible, the source, as a basis of elimination, of every primary case of typhoid, smallpox, scarlet fever, diphtheria, poliomyelitis, meningitis, etc., is held as an invaluable public health procedure.

5. *Immunology*: Immunization has been deemed expedient as a public health procedure in safeguarding the public against certain communicable disease, inasmuch as an immunization of the well retards and prohibits the incidence of these communicable diseases in a most dependable way. Health departments and units do not arrogate to themselves the sole right to practice this phase of preventive medicine; but, on the other hand, are glad to see the private physician diligently administering same to those of his care. However the efforts of a health department should, under no circumstances or condition, be abated in securing a universal immunization against smallpox, typhoid fever, diphtheria, etc.

6. *Child Hygiene and Maternity*: In child hygiene and maternity work health units accept an advisory rather than a mandatory agency. In their diagnostic clinics and school inspections, examinations and advice are given physical defects and recognized pathologic conditions are referred to the family physician and specialists for correction and treatment. The sufferers from errors in a past child birth are urged to seek medical and surgical relief for present pathology and to obtain trained attendance in future parturitions. Public health workers not only seek to obtain for a child a strong and healthy parentage but also desire for the babe and child proper medical attention and the services of competent pediatricians at the beginning of any serious sickness rather than when cases are dangerously advanced. By such teaching many of the hazards of childhood may be avoided.

Official public health workers do not consider operative, surgical, or dental clinics as strictly activities for health departments or units to engage in and when so done only as demonstration work. However, here again volunteer agencies have oftentimes "wished" it upon health units. Welfare workers and social workers in their ardent efforts to contribute something of worth to the unfortunate and less fortunate of the race establish free clinics, and clinics of minimum charge, solicit and obtain free service and part pay service from the medical and dental professions. Therefore, in the minds of some public health workers and practicing physicians it has been deemed expedient in those localities where no charity hospital facilities are available, for health units, when adequately financed to maintain a few cots and operating facilities for the indigent poor and the financially strained with the following requisition in vogue, that all surgery be done by members of the medical profession, not by the physician of the health department, and they alone, the operating surgeon, in the light of the social and financial status of the patient or patients family determine whether his services shall be free or a minimum charge made. This program takes from the volunteer agencies this important phase of their activities and perhaps fortunately curtails the unbounded activities of an over-zealous unofficial agency. However, in a number of places, for

the lack of correct understanding, or by virtue of errors, made, unintentionally perhaps, a few physicians oppose or do not support such a project. On the other hand the dental profession, almost without exception, welcomes and supports a free dental clinic, ambulatory or stationary, that deals with the children under certain age limits (10 or 12 years), stating that this demonstration made in the school or local clinic is of such inestimable educational value that the dental profession is wonderfully benefited, for the child thereafter will, with few exceptions become a regular patron of the dentist. However, this demonstration and educational work does not appear to be any more outstanding than the results that follow correction of certain defects of vision, throat and nose obstructions, defects of hearing, etc., where the backward child, the repeater in school, failing repeatedly to pass from one grade to another, dull, listless, with a physiognomy suggestive of feeble-mindedness, suddenly after corrective measures have successfully been instituted, almost miraculously changes to brightness, alertness, and progresses rapidly in studies pursued.

7. *Laboratory*: It is especially desirable to have a laboratory and technician in the office of the county health unit to aid in the diagnosis of communicable disease, the termination of quarantines, analysis of public drinking water, milk, foods, etc.

In the absence of same, a close relationship should be maintained with the State Laboratory. Mailing cases, slides, containers, etc., should be kept in the local office for the obtaining and early mailing out of specimens. A unit is fortunate if the director has a mailing privilege to be used in transmitting all specimens from his office and all official mail. Such laboratory work or facilities may be of practical worth to any physician and of inestimable worth in the protection of public health.

8. *Antimalarial*: The antimalarial work of a health department has come to be looked upon as more or less a antimosquito work. In such a work a little may be done or quite an extensive work may be undertaken and successfully executed. Although this work correctly comes under the supervision of the health department, if the problem is a big one, if there is much low land, stagnant or run-

ning waters, if surveys show many breeding places of the anophelene species, the quadrimaculatus, punctipennis, crucians, etc., not only in pools, running waters, etc., but in and about many residences; then of necessity there must be a special budget raised and a specially trained personnel to methodically and successfully carry out this campaign.

9. Life extension not discussed.

10. *Vital Statistics*: Quite accurate records are kept of all our material resources, the ores, minerals, granite, stones, lumber and its stumpage, the sheep and cattle of the field, the wheat crop that is garnered, the cotton bales that are ginned and marketed, a record is made of every business transaction and legal procedure. Millions are spent every year in recording and preserving data on all commercial or real estate exchanges, whether of petty or enormous values. But the greatest creature of all creation, man, the instigator and recorder of all commercial transactions oftentimes fails to make a record of the two greatest events of his life, his birth and his death, and passes on to be numbered with the earth's millions of the unknown. Oftentimes health departments can do no more than guess at the number of cases of tuberculosis, malaria, pellagra, and other diseases that may exist in their jurisdiction. But the light is dawning, the change we trust is rapidly coming. The Chambers of Commerce of the Nation and other civic organizations are interesting themselves therein for life insurance companies are basing their rates on such data, homeseekers are making their choice on such information, and industrial plants and investors of every kind are placing their factories and money on the validity of these statistics, so it behooves the general public, the physician, the health department and all to make vital statistics something more than a guess. If we must and can commercialize the commodity of public health we cannot afford to offer a spurious product, an untenable promise, but a sound commodity, a faultless commodity that can be validated by authentic morbidity and mortality reports.

Watts has said "the health of the people should be the first care of the State and the highest aim of scientific medicine is the prevention of disease, and the duty of the doctor is not only to cure disease, but to co-operate

with the organized forces to prevent it." The burden of this paper might be said to be to show that a county health unit in its inception or purpose is to be an official organization that all medical men of vision could endorse and support, that its personnel should be made up of public health workers of the medical, dental, nursing and allied professions, that their specialty was preventive medicine, a branch of the medical science, that they were members of organized medicine, that their official or semi-official publication was the Journal of American Public Health, a sister publication to the Journal of the American Medical Association, Disease of Children, Hygeia, etc., and that its mission of necessity is preventive medicine and preventive medicine must prevent or fall short of its high mission to the public who support it.

The building of sanitary privies, will reduce the incidence of typhoid, cholera, dysentery, tuberculosis, trichinosis, hookworm, and other intestinal parasitic diseases. Food control, communicable disease control, immunization, antimalarial work will all reduce the incidence of disease and will also reduce the incidence of a devitalized and impoverished citizenship.

If there were no altruism in the medical man and his viewpoint were always selfish would he be the loser? Who would select an impoverished people for a financial success in the practice of medicine? Could the work of a health department be detrimental to the practicing physician when it hopes to get all correction and remedial measures accomplished through him and he alone is the arbiter of all fees and all favors? Is it of any consequence to the medical profession who treat and correct pathology to observe that through the partial efforts of preventive medicine the time of life or rather life expectancy has been tripled in the past four hundred years? Eighteen years being life expectancy then; today it is fifty-eight years. With this total of years added to human life the physician has three times as long to care for the maladies and accidents of life as he formerly had.

No, the well equipped, thoroughly trained, efficiently specialized physician of today has naught to fear from the sometimes hoisted fallacy of "State Medicine" or the legitimate

practice of preventive medicine, for as long as new life comes to gladden the heart of motherhood, as long as ingenious and industrious man builds more deeply and at greater lengths and to greater heights the industries of the world the concomitant accidents, hazards, and maladies will ever engage the careful attention of the painstaking physician and compensate him most acceptably.

We trust this paper may bring a clearer understanding of the purposes and legitimate activities of an official health department, especially if any such clarification were at all necessary. Oftentimes a misunderstanding or misinformation, will engender criticism, dissatisfaction and intolerance, while a clear understanding and correct information may bring approval, unity and co-operation.

This is found to be almost universally true of real men, of true men, men who look for the high way of life, who travel not the low level and who recognize that "to every man there openeth a high way and a low, and every man decideth the way his soul shall go."

DISCUSSION

DR. E. C. MASON, Russellville: Dr. Smith's paper is just in line with the development of preventive medicine in our work of getting rid of trachoma in this State. About five years ago the U. S. Public Health Service undertook this work in co-operation with Dr. Garrison, your State Health Officer, after a survey had revealed a widespread prevalence of this disease.

It is estimated that there are about one thousand blind people, blinded by trachoma in the State of Arkansas. There are also from seven to ten thousand other cases in all degrees of severity, many of these on the way to blindness.

When we consider that the average productive wealth of this country is over five hundred dollars annually, it is easy to see that our economic loss is easily in the neighborhood of a million dollars a year from this one preventable disease and we should add the misery of these afflicted people and the cost of their maintenance. All this makes trachoma a public health problem of the first magnitude.

During the last five years, the U. S. Trachoma Hospital at Russellville has given relief to about one thousand cases, from 46 counties of the State. From one county alone we have treated three hundred cases, from another one hundred cases; and on down to only one or two from some of these counties. We should have all the active cases we can take care of. They are most dangerous to society at this time while they are shedding so many tears. By getting them in to the hospital we lessen the danger of infection to their families, to the schools and to the community.

We get many old chronic cases that are practically well of trachoma, but still suffer from the consequences of the disease. Many of these are salvaged by a simple operation and returned in a very short while to their homes restored

largely to productive industry and to the support of their families.

I should say that this treatment is free including bed and board, the only expense being for personal laundry.

As physicians, your support is solicited in getting active cases to us as soon as possible; and others whom you think this service will benefit. In doing this you contribute to the safety of the eyesight of everybody by removing a menace to your community. You also increase your future income by the restoration of nonproductive individuals to productive industry so they can pay their bills.

We need a larger hospital in Arkansas. Ours is the smallest in all the States. Too small by half. We want to do a bigger work for this State, but are handicapped for room. What we are asking for is that our Legislature provide funds for renting a suitable structure for this purpose. With a slightly increased overhead expense we can take care of twice as many patients. The need is here, and no doubt of it. The U. S. Public Health Service is paying all the expense except the rent of the building. Arkansas can surely afford a building on a par with the best in the other States, and I believe she will.

With adequate hospital facilities, and a field service to hunt up suitable cases; with the education of the public to the danger of infection and the means of prevention, trachoma will cease to exist except sporadically like yellow fever and the plague.

DR. H. MOULTON, Fort Smith: I wish to confirm what Dr. Mason has said. I want to urge the medical profession of the State of Arkansas to support this trachoma hospital at Russellville. It is supported by the U. S. Government in greater part and in a small part by the State of Arkansas and you can send your trachoma cases there and they will be treated free of charge. Dr. Mason is doing good work. I have seen a great many patients who have been through his hands and they have all been benefitted. I have sent a great many patients to him. The benefit is not only in relieving the patient of his trouble, but the education that the patient gets from the institution which he is able to carry back home and help to prevent the incidence of the disease in the community in which the patient lives. The incidence of trachoma is growing less in the State of Arkansas. I can notice it from year to year. It is largely due to the education that people are getting from Dr. Mason and other sources as to the proper means of preventing its spread.

DARK DANGERS

The stingy farmer was scoring the hired man for carrying a lighted lantern to call on his best girl.

"The idea," he exclaimed, "when I was courtin' I never carried no lantern. I went in the dark."

"Yes," said the hired man sadly, "and look what you got."—*Jour. Medical Society, New Jersey.*

THE TREND OF MEDICAL PRACTICE OF TODAY*

By J. K. SMITH, Texarkana

I have been prompted to write this paper because on the tenth day of March, 1926, I read a press report stating that five physicians of Ft. Smith, Ark., had been expelled from their county medical society for violating the constitution, which forbids contracts with any association, except with railroads, corporations and insurance companies, etc. This stimulated me to look up the status of the contract practice situation, and I am somewhat at a loss as to how the medical ethics stands in regards to the situation. I am herewith quoting two sections of resolutions which I understand went to the A. M. A. Council from Alabama, which I shall use to constitute the basis of this report:

Section 1:

A. That a physician may, without violating the ethics of the profession, practice for a stated salary or on a contract basis, for the employees or laborers of a railroad, mining, manufacturing, commercial or public service company, corporation or establishment, so far as accidents or injuries received in the service of such organizations are concerned; or for accidental injuries to any individual for which such company, corporation or establishment may be responsible.

B. That a physician, may without violating the ethics of the profession practice medicine and surgery for the unskilled or common laborers of a mining or manufacturing company or corporation, and the dependent members of their families, but not for the skilled laborers, skilled operators, mechanics, craftsmen, salaried employees, superintendents, managers and officials of such companies or corporations, or for their families.

Section 2:

A. That it shall be a violation of the ethics of the profession for a physician to agree to contract to perform or administer medical, surgical or hospital service directly, or through an agent, representative or agency to private individuals, list or lists of individuals on a monthly basis or other stipend.

The only difference I can see in these articles of ethics is that the railroad or corporation, etc., have the power to enforce its demands in medical matters, but not the individual and that the medical profession has changed its ethics to conform to the standards or desires of the corporations concerned. So far as I know all railroads and corporations do deduct a certain portion of fees from the

wages and salaries of their employees. A corporation should not have any right that is not granted an individual; since corporations and more especially railroads have decided to do all surgical service and reduce their hospital rates to dependents of employees a certain complication and dissatisfaction will ultimately follow. Such propaganda must lead to the common conclusion by the layman, that he is paying too much for his medical and surgical services, and to bear out this contention, I am quoting from a newspaper editorial which was only recently published in one of our near-by towns.

"We note where a man is writing in an exchange complains of the expense of a three-weeks stay in a Texas hospital, he says: 'The expense of hospitals has so greatly increased that steps should be taken at once by those in charge to lower rates at once. I underwent an operation, not particularly a serious one, but had to remain in the hospital three weeks. A special nurse cost me \$45.00 a week with \$10.00 extra for the nurse's board. My room and board was \$40.00 per week. Of course, this did not include my doctor's fee; but my three weeks' stay cost me \$270.00. It was necessary for me to have the operation and I am thankful I had the privilege of going to a first-class hospital, but being a man on a small income, the expense has crippled me financially for a year'."

We do not know the charges in hospitals generally, but we believe the prices charged in the case given is somewhat higher than those usually demanded, but that there is an important point brought out in this man's experience cannot be denied. It should not be a financial disaster to a man of modest income who must go to a hospital for a few weeks stay, or send some member of his family there. It begins to look like hospitals are maintained for two classes: The rich and the very poor. The man of wealth cares little about being charged \$90.00 per week for hospital attention and those who have no money are provided for in charity wards.

But this does not include that great body of independent persons who while on small incomes do not ask for help or solicit charity but want to pay their way. There is something radically wrong when a surgical operation in a hospital impoverishes such a man for months, often for years.

*Read before the 52nd Annual Meeting of the Arkansas Medical Society, held in Little Rock, May 11-12-13, 1927.

A nurse's job is not an easy one, but there should be a limit to the charges for her services. When a loved one is sick we are not disposed to squabble about the price of any thing that will insure restoration or comfort. We have in mind a man who, all told, including his little home, was worth \$4,000, not more. His wife sorely needed a surgical operation. On account of the expense the matter was put off month after month. When no further delay was possible, a trip was made to a nearby city. The wife was in the hospital five weeks and the doctor's fee and the hospital charges were a little more than \$1,700.00. She was restored to health and neither she nor her husband regretted the expenditure, but nearly one-half of all they saved through years of economy was gone.

Probably the most serious phase of the matter is that many persons who could be cured by an operation often hesitate and delay going to a hospital until too late because of the heavy expense. It is the man of small income who is caught between the upper and nether millstones who suffers. So far as hospital benefits are concerned it is better to be a pauper than a man in modest circumstances who wants to feel himself independent and self-reliant."

I am certain that an expense account is kept and the value of operations done in railroad hospitals are impressed on the mind of the employee as to what a great saving it has been to him by having been an employee of the railroad. This I know is propaganda to keep their labor more satisfied and avoid dissatisfaction and strikes among them; yet, it seems hardly fair to the remainder of the laboring world to deny them the same privileges enjoyed by corporation employees. That the idea will call for the criticism of the profession by the laymen is certain, and justly so.

In one of the small cities in a neighboring State a very good physician went on the "rocks," as it were, financially, owing to poor investments. His creditors took his private hospital and his private practice too, and are advancing him only sufficient funds to live on, they keeping the balance to pay his indebtedness. This is commendable in the physician, but how about the business men in charge, when they find out that money can be made when surgeons' fees as well as hospital fees are collected. Do you think they will not

be loathe to give it up, and rather decide to give him a salary after the indebtedness is paid, and if he does not agree to their salary, then some one else will. Already in many hospitals the hospital is charging the surgeon's fee, having the house surgeon perform the operation and keeping the operating fee for themselves. Good business indeed!

It is a notable fact that the life insurance companies have depended upon the medical fraternity for examinations of their prospective applicants since their organization, but during the past few years the majority of them have entered the non-medical field and do not require a medical examination. This must of necessity raise their mortality rate, but since the unsuspecting public must pay, there is no loss to them. Many of these companies realizing the value of the medical man's opinion, send out (without pay) inquiries relative to applicants, ultimately taking the advantage of a physician's friendship to his patients and capitalizing it for gain. Others have the audacity to send out inquiries with fifty-cent checks requesting a report. This is accompanied with a nice letter telling what a good income this will be to the medical profession and that he so liberally gives it to the physician rather than some lay reporter.

Industrial insurance companies have obtained laws in many States requiring all industries employing three persons or more to carry compensation insurance, but what concerns the medical profession most is that they usually select one physician who does the bulk of industrial practice in a community claiming that since they pay the physician they have the right to say who the physician shall be. If any one thinks that insurance companies pay the bill they are laboring under a misapprehension. In the end the laborer always pays the bill.

Why are these companies in the insurance business? For their health? I should say not, and if you will look over their financial statement you will say so too. Some time ago I had a letter from one of their physicians, signing his name, "Zone surgeon," criticizing my method of treatment, and saying that to notify him should such an operation become necessary again. I promptly wrote him that the State gave me the legal right to practice medicine and I reserved the right to choose my own method of treatment.

If they assume this authority now, what will be their attitude should they become more powerful, and each year they gain more authority. Already railroad surgeons are failing to call in the family physician, in many instances even when the family offers to pay any expense. The right for a man to choose his own physician has been an inherent principle in the medical profession for years, even as much as he has the right to choose his own religion. While consultations may not as a rule mean much, and as the practice of medicine in general is made up of about twenty-five per cent medicine and seventy-five per cent confidence and consolation why should one be denied the greater of the two. The fact that one of our great automobile manufacturers established a hospital and inculcated ethical standards contrary to all professional customs and ethics is well known, and this too over the protest of one of our largest and most influential county medical societies. Why was this possible? The answer is simple. He had sufficient money to force his demands.

Some months ago I read an article where a community in one of our midwestern States employed a physician giving him a stated salary which was raised by each patron subscribing so much to the fund, and they stated that the scheme worked very satisfactorily. The article went on to state that Dr. Chas. H. Mayo had become very much interested in the project, so between the corporations on the one hand and the rural district on the other the profession is being gradually encroached upon. Many more things could be stated, but this is sufficient to find the trend of things. So far I have confined my remarks to facts, but unless the tide is turned we will not find ourselves facing State medicine, but corporation medicine, instead. No profession can keep its self-respect and have its policies shaped by those outside of that profession, since they are not in sympathy and do not understand its principles. It seems that money has the power to dictate certain policies to our great profession when it wishes to use it for mere gain.

Since these are the conditions, what's the remedy? In the instance of the railroad I would suggest:

First. That they confine their medical practice to employees only. The social and econom-

ical conditions do not justify any special privileges granted railroad employees since their wages are equal to any other class of laborers.

Second. That their chief surgeons or surgeon superintendents with authority to appoint local surgeons be required to limit their practice to employees only since by the influence of these appointments they are given unfair advantages over other physicians.

Third. That local surgeons charge employees for their professional service at the same rate that prevails in their respective communities and that pass privileges be withdrawn from such physicians and their families except when the physician is on duty for the company.

In the matter of industrial insurance or corporations located in communities where other physicians are practicing, that no physician will allow himself to become especially designated as "Company Physician" since many times it gives him an undue advantage by his coming in contact with families he would not otherwise know, and many times he would not be chosen by the injured, if he had a choice. Also, because in many instances the injured party is not able to pay his regular family physician by reason of the injury and the fee paid for the injury is the only one paid to the physician doing the remainder of the practice it would not work such hardship on him; besides, it is democratic to allow a man to choose his own physician.

In the instance of life insurance companies since they have chosen to write non-medical insurance, let them do so at their own risk and take no part in giving information unless such information is properly paid for. That some method for taking care of the rural sick be worked out by the physicians themselves and not have it done by the laymen, as their methods cannot conform to medical standards. The great number of physicians of America certainly are wise enough to dictate their own policies without outside interference.

The entire medical profession of Arkansas is invited to attend the meeting of the SOUTHERN MEDICAL ASSOCIATION, November 14-17, at Memphis.

THE JOURNAL

OF THE

ARKANSAS MEDICAL SOCIETY

Owned by the Arkansas Medical Society and Published under the direction of the Council.

WILLIAM R. BATHURST, Editor
810-812 Boyle Building, Little Rock, Arkansas.

Published Monthly. Subscription \$3.00 per year; single copies 25 cents.

Entered as second-class matter, June 21, 1906, at the postoffice at Little Rock, Arkansas, under the Act of Congress of March 3, 1879.

Acceptance for mailing at special rate of postage provided for in Section 1103, Act of October 3, 1917, authorized August 1, 1918.

The advertising policy of this Journal is governed by the rules of the Council on Pharmacy and Chemistry of the American Medical Association.

All communications of this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the State. Notice of deaths, removals from the state, changes of location, etc., are requested.

OFFICERS OF THE ARKANSAS MEDICAL SOCIETY

HENRY THIBAUT, President.....	Scott
R. H. T. MANN, President-Elect.....	Texarkana
HOMER SCOTT, First Vice-President.....	Little Rock
J. B. WHARTON, Second Vice-President.....	El Dorado
O. J. T. JOHNSTON, Third Vice-President.....	Batesville
R. J. CALCOTE, Treasurer.....	Little Rock
Wm. R. BATHURST, Secretary.....	Little Rock

COUNCILORS

First District—W. W. VERSER.....	Harrisburg
Second District—J. L. JONES.....	Searcy
Third District—M. C. JOHN.....	Stuttgart
Fourth District—W. T. LOWE.....	Pine Bluff
Fifth District—L. L. PURIFOY.....	El Dorado
Sixth District—B. C. MIDDLETON.....	Texarkana
Seventh District—DEWELL GANN, SR.....	Benton
Eighth District—ANDERSON WATKINS.....	Little Rock
Ninth District—SAM G. DANIEL.....	Marshall
Tenth District—THOMAS DOUGLASS.....	Ozark

Editorial

MEDICAL MEN WIN SPECTACULAR HEALTH FIGHT IN MISSISSIPPI VALLEY FLOOD RELIEF SERVICE

One of the most spectacular fights against disease in the peace-time history of the nation resulted as an aftermath of the Mississippi flood the past year.

Only the unremitting efforts of doctors, nurses, and sanitary experts from all parts of the United States, serving under the American Red Cross, enabled the relief authorities to meet a health situation which was authoritatively described as one of the most serious in national history.

Outstanding achievements of these medical and health authorities, including forces of the Public Health Service loaned to the Red Cross by the Federal Government, include:

Inoculation against typhoid of more than half a million people in the flood area and

vaccination of other thousands against small-pox.

Screening the homes of 18,000 malaria carriers as precaution against infecting others.

Maintenance of better than normal health rate among refugees in flood area despite abnormal conditions.

Completion of a 30-day clean-up in every flood State, resulting in added health protection to returned refugees.

This is only a part of the service rendered in the interest of health by the medical men in the Red Cross relief forces.

Disaster relief is a charter obligation of the American Red Cross, a service made possible by its membership. The Annual Roll Call from November 11 to 24 this year, is an opportunity for everyone to join the Red Cross for the coming year, and become a part of its humanitarian organization.

THE FAMILY LISTER*

As this year is the centenary of Lord Lister's birth and because of my friendship with members of that noted family, I have wished to write something concerning three Joseph Jackson Listers.

The Lister family was not of the English nobility as has been asserted. They were tradesmen, farmers, malsters, watchmakers and wine merchants. Lord Lister said that it was a myth that he was a descendant of the famous Dr. Listers, who were physicians to James I, Queen Elizabeth and Queen Ann.

Since about 1705 the family has been affiliated with the Religious Society of Friends. At the present day the traditions and influence of this Society are very marked in the members of that family. They are people of honesty, culture and intellectuality combined with simplicity of manner and with a great regard for scientific truth.

JOSEPH JACKSON LISTER, SR.

Joseph Jackson Lister, Sr., the father of Lord Lister was born in 1796. He was a merchant, self-educated and a remarkable scientific man. He left school at the age of fourteen, but later acquired a thorough education, which many men with college degrees do not possess. He had a knowledge of Latin, French and German. He was also an excellent artist.

*From the Department of Pathology, School of Medicine, University of Arkansas, Little Rock.

Although a very busy merchant he found time to grind glasses. His optical studies and research were performed during leisure moments. His perfection of the achromatic lens made the microscope a more useful scientific instrument.

In 1913 his son gave to The Royal Microscopical Society the father's paper "On the Limit to Defining Power in Vision with the Unassisted Eye, the Telescope and the Microscope." This work had never been published. In it he predicted many discoveries which have been made by Abbe. At the time of his death all kinds of optical inventions were found which he had drawn and explained. German scientists later published much of this same work. The reason he had not given this work to the world was because he had been grieved on account of the death of his son.

His research placed him among the leading scientists of that time. It is interesting to note that he wrote papers in collaboration with Dr. Hodgkin.

JOSEPH JACKSON LISTER, JR.

It was in this scientific and religious atmosphere that Lord Lister was born during the year 1827. Since he had the associations with a father who had perfected the microscope, it was natural that the son would have inclinations in the field of microscopy. The sincerity and simplicity of his life reflected the influence of the English Quakers.

His first paper on the iris was physiological, and, of course, he employed the microscope. His next physiological papers dealt with involuntary muscle. His work on inflammation revealed his interest in pathology. He was devoted to the science of bacteriology and his work on lactic ferments is a masterpiece. He spent considerable time in researches on the coagulation of the blood. As a great surgeon who first successfully adopted aseptic technique, he was not a mere technician, but reasoned in terms of physiology, chemistry, anatomy, histology, pathology and bacteriology.

When he had discovered the great avenue of aseptic surgery he could go "leagues beyond leagues." His radical operation for carcinoma of the breast, surgery of the abdomen, urinary bladder and urethra, extensive operations on bones and joints, etc. could never have been performed without asepsis.

He designed and devised instruments to accomplish this work.

In order to study the results of Lister's work we need only to see the records of the Crimean War or those of our Civil War, and compare them with the surgical records of the World War. The extent and perfection of our operative surgery could never have been attempted without asepsis. Brain surgery could never have been successful. Experimental work on animals could never have been undertaken. Such discoveries as that of insulin could not have been made without adopting the principles of Lister.

This Englishman whose death occurred only fifteen years ago can easily be associated with men like Hippocrates, Galen, Avicenna, Glisson, Sydenham, Mathew Baillie and Pasteur.

JOSEPH JACKSON LISTER, F. R. S.

The Lister family is not unlike the Darwin family in the numerous heirs which it has given to science. During the year of the centenary of the birth of the famous uncle, another Joseph Jackson Lister died and left a record behind. He was the son of Arthur Lister, a renowned botanist, and a grandson of Joseph Jackson Lister, Sr. His most important work was on the study of Foraminifera, which won him the fellowship of the Royal Society in 1900. In this study there were two phases, which occurred in a number of species. It was suggested that these two forms represented males and females, but Lister's observations disproved this theory. He proved that both phases were capable of reproduction and that they were alternating generations. He wrote the article on Slime fungi (Mycetozoa) in the eleventh edition of the Encyclopedia Britannica, which really was the review of the great work of his father, Arthur Lister.

I wish to thank Miss Gertrude Pim, niece of Lord Lister, for the material which she generously furnished me for this article.

—Harvey S. Thatcher, M. D.

Col. Lindberg, "Lone Viking of the Air," was the guest of the City of Little Rock, October 1. While here he was given a 609 examination by Flight Surgeon, P. E. Thomas, Jr., and pronounced none the worse for his strenuous campaign. In fact, he was rated far above the average pilot. No physical defect whatever. Height, 6 feet, 2½ inches, weight, 154. He has never weighed over 157.

Abstracts

LIVER COCKTAIL: LIVER IN EDIBLE FORM FOR PERNICIOUS ANEMIA PATIENT

An edible liver cocktail is prepared by William Thomas Wilkins, Jr., Piqua, Ohio (Journal A. M. A., Sept. 17, 1927), as follows: After having scraped the liver it is run through a meat grinder twice, the finest cutter being used, and placed on ice immediately. One-half pound of liver makes four tablespoonfuls of crushed product. Prepare a sauce as follows: Tomato catchup (Heinz), $\frac{1}{2}$ cup; lemon juice, $\frac{1}{4}$ cup; Worcestershire sauce, 2 teaspoonfuls; chives (finely chopped), $\frac{1}{2}$ teaspoonful, and salt and pepper, to taste. Mix the liver and sauce in the proportion of one part crushed liver to two and a half parts of sauce. Chill thoroughly and serve in a cocktail glass with salt crackers or wafers.

Personal and News Items

Dr. and Mrs. J. P. Runyan have returned from a visit to California.

Dr. H. A. Murphy of El Dorado recently visited Dr. C. S. Pettus of Little Rock.

Dr. and Mrs. C. V. Scott, Little Rock, have returned from a motor trip in the Northwest.

Dr. William R. Holloway of Center Ridge was a recent visitor to Little Rock.

Dr. C. E. Hurley of Bentonville recently visited in Little Rock and Holly Grove.

Dr. R. C. Dorr of Batesville, left for Rochester, Minn., September 17, to attend the Mayo Clinics.

Dr. C. S. Pettus of Little Rock has been appointed Assistant Surgeon-in-chief, Sons of the Confederate Veterans.

Dr. and Mrs. M. E. McCaskill, Little Rock, have returned from their vacation spent in Missouri.

Dr. O. J. T. Johnston of Batesville has been appointed local surgeon for the Missouri Pacific Railroad, the vacancy being made by the death of Dr. W. B. Lawrence.

In our news item last month with reference to Dr. Paul Leo Mahoney, we should have reported him as returning from his vacation instead of New Orleans clinics.

Dr. F. Michael Smith, county and city health officer of Pine Bluff, has tendered his resignation, effective October 1st. He goes to Vicksburg, Miss., where he will assume the duties of city and county health officer of Vicksburg and Warren County.

The members of the Craighead and Poinsett County Medical Societies were guests of the Trumann doctors at a banquet served at Raney's Cafe, September 15. After the banquet a scientific program was rendered. Pellagra in its various forms was discussed in detail. The surgical phase of Industrial Medicine also came in for its share of discussion.

WANTED—Salaried appointments for Class A physicians in all branches of the medical profession. Let us put you in touch with the best man for your opening. Our nation-wide connections enable us to give superior service. Aznoe's National Physicians' Exchange, 30 North Michigan, Chicago. Established 1896. Member the Chicago Association of Commerce.—(Adv.)

Dr. and Mrs. Frank A. Gray and daughter, Miss Evalee, and two sons, Laman and Paul, of Batesville, motored through the West the latter part of July. Going, first, direct to Colorado Springs, driving to the summit of Pike's Peak, and, after spending a few days, around Denver, drove to Salt Lake City, thence to San Francisco and down the coast, visiting Los Angeles, Pasadena and San Diego. They returned by way of Phoenix, Arizona, and north to the Grand Canyon and back by the Roosevelt Dam, El Paso, Ft. Worth, Dallas and Texarkana, driving a distance of about 6,600 miles.

The American Board of Otolaryngology will hold an examination in Memphis the first day of the Southern Medical Association meeting, Monday, Nov. 14, 1927, inasmuch as the board rarely meets in the South, we are desirous of having as many as possible take the examination. The certificate of this board is probably the most valuable of its kind in the world and is certainly the most valuable certificate that any Ear, Nose and Throat man in America

possesses. All applications or communications concerning this examination should be addressed to Dr. W. P. Wherry, 1500 Medical Arts Building, Omaha, Nebraska.

The forty-ninth annual session of the University of Arkansas School of Medicine opened September 14. The new members among the faculty of sixty are: Paul R. Day, department of chemistry, from Columbia University; T. L. Johnson, bacteriology, University of Chicago; W. L. Hardesty, pathology, Washington University; C. Lee Shilliday, anatomy, Cornell University; Garland Rushing, gynecology, University of Illinois; K. W. Cosgrove, ophthalmology, University of Toronto; R. E. Pryor, gynecology, University of Illinois; Byron A. Bennett, urology, University of Arkansas; Miss Maurice Couch, bacteriology; Carl S. Williamson, surgery, Mayo Clinic, Rochester, Minn. 140 students have enrolled for this session. Thirty-five Freshmen; twenty-eight Sophomores; forty-four Juniors; twenty-nine Seniors, and four specials.

The Sixth Annual Meeting of the Southern Association of Anesthetists will be held at the Claridge Hotel, Memphis, Tenn., November 14th and 15th.

This organization meets annually in conjunction with the Southern Medical Association. Its objects are: to advance the science and art of anesthesia; stimulate interest in all forms of anesthesia and analgesia, general, regional and local; to advance and improve the status of anesthesia administration as a well defined specialty; and to offer and provide a Forum for the presentation and discussion by all interested, of phases and problems of anesthesia which surgeons, obstetricians and anesthetists constantly encounter.

The following applicants satisfactorily passed the final examination at the May meeting of the State Medical Board of the Arkansas Medical Society and were granted certificates:

Lawson C. Aday, A. A. Reeder, O. J. MacLaughlin, Hoyt R. Allen, Arthur Osterman, Wm. F. Shearer, E. E. Elliott, Vogel Jeffery Louis P. Barnett, J. J. Faust, Robert H. Hood, Paul F. Siman, Forrest A. Corn, Robert E. Wyers, Joshua Finkel, Mrs. Poline Tenzel, Joseph Norris Rose, Wylie G. Chesnut, Wallace W. Chiles, Daniel R. Hardeman, Jewell

W. McLean, Charles S. Paddock, John N. Compton, Lloyd G. Little, Karl W. Pieratt Paul M. Fulmer, George V. Buxton, S. S. Povlin, Joseph A. Burns, Joseph Roe, Martin C. Hawkins, Jr., James P. Turner, Gould T. Wells, Walter D. Easterling, Victor F. Hessel, Carey B. Batson, John H. Burge, Howell Leming, J. H. Johnson, Harry Robinson, J. M. Rape, R. J. Haley, Harry Bitter.

All graduates of the School of Medicine, University of Arkansas except, Rape, Robinson and Paddock, who graduated from the University of Tennessee.

FIFTEEN ECLECTICS IN CONNECTICUT LOSE APPEALS

The appeals of fifteen eclectic physicians recently filed in superior court at New Haven were dismissed because of fraud, August 30, it is reported, and the appeals of four other eclectic physicians were sustained. The appeals followed the action of the State department of health in revoking these licenses to practice. Those who lost their appeals because of "certain frauds on the part of the appellants" were Samuel Slabotsky, Samuel Posner, David K. Aronson, James Bockman, Roy A. Long, Alfred C. Von Sassenhofen, William D. MacCormack, Raymond C. Prisque, Michael M. J'Anthony and Aurelius R. Dejanis. Those who lost their appeals because "there was fraud on the part of the St. Louis College of Physicians and Surgeons from which the appellants graduated" and "because these appellants had knowledge of the same and were guilty of fraud in connection with their admission and education there, and, also among other acts, in obtaining their certificates from this State pursuant to their examination before the eclectic board" were Anthony Campo, Modestino Coppola, William Feldman, William Levy and Etamer A. Mower. The four whose appeals were sustained were Julius Karp, Ralph F. Long, James W. Bush and Allie J. Goodwin. The judge said in part, it is reported, with regard to the first three of the last four that he was unable to find any fraudulent practice by or imputable to these appellants. Goodwin's appeal was sustained because the judge was "satisfied that he was acting in good faith and without any intention to deceive." Judge Brown in his memorandum of decision disposed of the appeal of Feldman first, saying,

in part, that the "brazen fraud of Feldman in obtaining his certificate and fight to retain it garnished by his obviously perjured testimony during this trial leads me to dispose of his appeal first in the fewest possible words"; as to Campo, Cappola, Lerner, Levy and Mower, he said in part that "the evidence is clear that their preparation and training for the practice of medicine and surgery was poor, itinerant and incomplete, at the best, and their record as failures upon the way quite voluminous." In discussing the other appellants, Judge Simpson said, in part, with regard to Slabotsky that "the court has considerable sympathy for this appellant. He evidently started with an honest endeavor and intention to obtain a medical education. He entered the Kansas City College of Medicine and Surgery and was graduated from that institution, May 7, 1920. At the school, however, he fell under the baneful influence of Dr. Alexander. In his second application before the Connecticut board he swore that he had had one year of college work as preliminary education which was admittedly false and evidently put in with the help of Alexander to bolster up his standing before the Connecticut board. This representation was material and was done for the purpose of deceiving the Board."—*Jour. American Medical Association*.

SURGICAL SUGGESTIONS

Carcinoma in both breasts occurring simultaneously offers no hope from operation; carcinoma in both breasts developing consecutively is by no means hopeless.

Commonly mistaken for mammary carcinoma is a lymph gland swelling just at or beyond the upper, outer margin of the breast. This swelling—painful, tender, sometimes suppurating—is an infection of the *infero-external* portion of the thoracic chain of axillary glands. It lies over the fourth and fifth intercostal spaces at the edge of the pectoralis major and receives the lymphatic vessels of the lower lateral thoracic and upper abdominal wall. A swelling here is apt to be due to a furuncle or other infection near the waist line. The *Supero-internal* portion of the thoracic, pectoral or anterior chain of axillary glands overlies the second or third intercostal space

beneath the pectoralis major and receives anterior cutaneous and mammary lymphatics, and this portion is often early involved in breast cancer.—*The American Journal of Surgery*.



Obituary

FLOYD, GEORGE WASHINGTON—G. W. Floyd, M. D. of Western Grove, died August 25, 1927. He was born in Meigs County, Tennessee, September 30, 1850. Death was due to cerebral hemorrhage.

Dr. Floyd was active in his work up to the time of his death and was a loyal supporter of organized medicine. He had practiced medicine in Boone County for more than fifty years. He was a member of Boone County Medical Society, the State Society and the American Medical Association.

MILLER, OTEY—Dr. Otey Miller of Fayetteville died September 18, 1927. Aged 58. He was born at Pierce City, Missouri, but had lived in Fayetteville since before he began the practice of medicine. For many years, he acted as physician for the "Razorbacks." Surviving are his wife and son, Dick Miller.

PHIPPS, JAMES HENRY—Dr. J. H. Phipps of Clarendon died September 27, 1927. Aged 53. He formerly lived at Roe. Surviving are his wife, a son and two daughters.

BAKER, ABSALOM S.—A. S. Baker, M. D. of Snowball died, October 3, 1927, after a short illness. Aged 61. He had been a practicing physician for 30 years. He was a representative from Searey County and one of the four Republican members of the Forty-sixth General Assembly.

Dr. Baker is survived by his wife and seven children, R. S. Baker of Scotland, S. W. Baker of Las Cruces, N. M., John R. and Jack Baker, State Normal, Tahlequah, Okla., Bentley Baker of Snowball, Mrs. Nettie Cash and Mrs. Audie Etheridge of Snowball.



County Societies

MISSISSIPPI COUNTY

(Reported by F. D. SMITH, Sec.)

The September meeting of the Mississippi County Medical Society was held Tuesday evening, September 13, at Blytheville.

Present: Barksdale, Harwell, Hudson, Ellis, Tidwell, Martin, Sheddan, R. L. Johnson, Saliba, Husbands, Luekett, Massey, Usrey, Stevens, Hill and Smith. Visitors: Battle Malone, W. T. Swink and J. O. Speed of Memphis and A. M. Washburn of Blytheville.

The scientific program was as follows: "Head Injuries," by Battle Malone. "Pellagra," by W. T. Swink. "Hip Disease," by J. O. Speed.

The next meeting will be at Oseeola the second Tuesday in October.

Book Reviews

Lippincott's Pocket Formulary—By George E. Rehberger, M. D., Author of Lippincott's Quick Reference Book. Published by J. B. Lippincott Company, Philadelphia.

This conveniently sized, ready reference book is prepared to serve as a handy repository of the essentials of modern therapeutic knowledge without superfluous verbiage.

Sketch of the History of the Mayo Clinic and the Mayo Foundation—Octavo Volume of 185 pages, illustrated. Published by W. B. Saunders Company, Philadelphia, 1926. Cloth, \$3.50 net.

This book is intended to merely record in chronologic order the principal facts concerning the Mayo Clinic and the Mayo Foundation. We are pleased to note the name of Dr. Oliver C. Melson of the General Medical Staff whose service began with the Mayo Foundation in 1916. Dr. Melson now resides and practices in Little Rock.

A Manual of Pharmacology and its Application to Therapeutics and Toxicology—By Thorald Sollmann, M. D., Professor of Pharmacology and Materia Medica in the School of Medicine of Western Reserve University, Cleveland. Third Edition; entirely reset. 1,184 pages. Published by W. B. Saunders Company, Philadelphia, 1926. Cloth, \$7.50 net.

It seems to the writer of these notes that nothing could be of greater interest to the reader of medical books than the one whose title is described above. It gives an outline of the current conceptions of the actions of drugs.

The Specialties in General Practice—Compiled by Francis W. Palfrey, M. D., Instructor in Medicine at Harvard University, in collaboration with 14 other teachers of Harvard Medical School. Octavo of 748 pages. Published by W. B. Saunders, Philadelphia, 1927. Price: Cloth, \$6.50 net.

This book formulates in a practical way the more common conditions belonging to the specialties which particularly the beginning practitioner of today is most frequently called upon to treat. It describes the clinical management of many urgent conditions in which correct treatment promptly applied is of great importance.

Diseases of Women—By Harry Sturgeon Crossen, M. D., F. A. C. S., Professor of Clinical Gynecology, Washington University Medical School, and Gynecologist in Chief to the Barnes Hospital and the Washington University Dispensary. Sixth Edition, Revised and Enlarged. 934 engravings, including one color plate. Published by C. V. Mosby Company, St. Louis, 1926. Price, \$11.00.

That six editions of this book have already been published proves in itself its value to physicians and students of gynecology. New material is continually added, and of much importance in this issue is Dr. Crossen's use of iodized oil for x-ray visualization of the uterine and tubal cavities, particularly with reference to determining the tubal occlusions causing sterility.

Practical Surgery of the Joseph Price Hospital—By James William Kennedy, M. D., F. A. C. S., Surgeon to the Joseph Price Hospital, Philadelphia; Consulting Surgeon to the Norristown, Coatesville and Chambersburg Hospitals. Illustrated with 129 Original Half-tone Plates, Some in Colors. Published by F. A. Davis Company, Philadelphia, 1926. Price, \$10.00 net.

In writing this book, an attempt has been made by the author to deal in constructive criticism of principles involved in the surgical pathology of some important lesions as opposed to a discussion of destructive personalities. Dr. Kennedy places surgical conditions on a definite surgical basis. He gives his personal experience in a delightfully written manner. It will be much enjoyed and appreciated by the entire medical profession.

Physiology and Biochemistry in Modern Medicine—By J. J. R. MacLeod, M. B., LL. D. (Aberd.), D. Sc. (Tor.), F. R. S., Professor of Physiology in the University of Toronto, Toronto, Canada; Formerly Professor of Physiology in the Western Reserve University, Cleveland, Ohio. Fifth Edition. 291 Illustrations, including 9 plates in colors. Published by the C. V. Mosby Company, St. Louis, 1926. Price \$11.00.

This book is divided into ten parts, as follows: The Physiochemical Basis of Phys-

iological Processes; the Blood and the Lymph: the Neuromuscular System; the Special Senses; Circulation of the Blood; Respiration; Digestion; the Excretion of Urine; Metabolism; the endocrine Organs or Ductless Glands.

Many changes and additions are included in this edition, still it retains its original purpose, to serve as a guide to the application of the truths of physiology in the bedside study of disease.

The Surgical Clinics of North America (Issued serially, one number every other month.)—Volume VI, Number VI, (New Jersey Number, December, 1926.) 318 pages; 93 illustrations and complete Index to Volume VI. Per Clinic year (February, 1926 to December, 1926.) Published by W. B. Saunders Company, Philadelphia. Price: Paper, \$12.00; Cloth, \$16.00 net.

Twenty-eight clinics are described in this edition. The first one is the Clinic of Dr. Max Danzis, Newark Beth Israel Hospital. His subjects are as follows: Cholecystectomy, Analysis of 215 Cases of Gall-Bladder Disease, Operation and End-Results; Biliary Fistula with Chronic Cholecystitis and Pancreatic Lithiasis; Spontaneous Hemorrhage within Right Rectus Sheath simulating Acute Appendicitis; Dermoid Cyst in Umbilical Hernia; Torsion of Pedicle; Intestinal Obstruction; Recurrent Neurofibroma.

An Introduction to the Practice of Preventive Medicine—By J. G. Fitzgerald, M. D., LL. D., F. R. S. C., Professor of Hygiene and Preventive Medicine and Director, School of Hygiene and Connaught Laboratories, University of Toronto. Second Edition. Published by the C. V. Mosby Company, St. Louis, 1926. Price, \$7.50.

This book serves to outline some of the work of the medical man who is to function on the preventive as well as the curative side of medicine. The author begins his book with a chapter on "Aims and Problems of Preventive Medicine."

In the following chapters he describes each of the communicable diseases from the standpoint of: incidence, etiology, modes of transmission and methods of control, including the public health regulations ordinarily employed to prevent their spread. Disinfection is also discussed in the case of each individual disease, insofar as it is required or found to be useful.

GENTLEMEN! BEFORE GOING INTO THE REGULAR ROUTINE OF THE BUSINESS OF THE EVENING, I AM VERY HAPPY TO ANNOUNCE THAT THE NEXT ANNUAL MEETING OF THE SOUTHERN MEDICAL ASSOCIATION WILL BE HELD IN

MEMPHIS

THE CLASSIC METROPOLIS OF TENNESSEE
NOV-14- to 17- 1927
BE SURE TO BE THERE...BOYS/



HOO RAY!

FINE!

SURE/ I'LL BE THERE/

The President of a County Medical Society addresses a Meeting on important business!


MEDICINE and SURGERY in its every phase will be brought right down to NOW in the general sessions, the eighteen sections and conjoint meetings, and the clinics, making up the annual activity this year. Golf and trap shooting for those who love these sports—bring the clubs and guns. Alumni reunions—meet your old pals. Entertainment for all and something special for the ladies—bring the wife. A well rounded meeting, complete in every detail—Memphis, Tennessee, November 14-17, 1927.

ARE YOU A MEMBER of the Southern Medical Association? If not, you should be and can be if you are a member of your county and state medical societies—that is the only necessary requirement, plus \$4.00 for annual dues, which include the Association's own Journal, the *Southern Medical Journal*, each month.

You WILL join eventually—why not NOW?

SOUTHERN MEDICAL ASSOCIATION
Empire Building
Birmingham, Alabama

21st Annual Meeting Southern Medical Association
MEMPHIS Nov 14-17- 1927- COME!!



TOOT! TOOT!

WELL! THERE'S NO LAW AGAINST MY CHANGING MY MIND IS THERE?

THOUGHT YOU SAID YOU WASN'T GOING

Toot! Toot! We're on our way—
To Memphis, Tennessee,
On the Mississippi's stately
tide
A city fair to see!

Far and near the message speeds
To Doctors of the South—
Greeting!
The S. M. A. has set the dates
For the next Annual Meeting!

The Secretary of the County Society will please notify the State Secretary immediately of any error or change in these officers.

DIRECTORY

OF THE

COUNTY SOCIETIES OF THE ARKANSAS MEDICAL SOCIETY

1927

COUNTY	PRESIDENT	ADDRESS	SECRETARY	ADDRESS
ARKANSAS	S. A. Drennen	Stuttgart	J. E. Neighbors	Stuttgart
ASHLEY	L. C. Barnes	Hamburg	J. W. Simpson	Hamburg
BAXTER	J. I. Thompson	Yellville	J. J. Morrow	Cotter
BENTON	W. A. Moore	Rogers	H. J. G. Koobs	Rogers
BOONE	G. I. Jackson	Harrison	D. L. Owens	Harrison
BRADLEY	W. T. Fike	Warren	Rufus Martin	Warren
CALHOUN	C. T. Black	Thornton	T. F. Rhine	Thornton
CARROLL	Henry Pace	Eureka Springs	R. H. Huntington	Eureka Springs
CHICOT	E. Baker	Dermott	B. C. Clark	Lake Village
CLARK	J. P. Bremer	Point Cedar	H. A. Ross	Arkadelphia
CLAY			M. C. Richardson	Datto
CLEBURNE				
CLEVELAND	A. J. Hamilton	Rison	H. O. Wilson	Rison
COLUMBIA	G. F. McLeod	Magnolia	T. H. Jones	Magnolia
CONWAY	A. R. Bradley	Morrilton	W. H. Bruce	Morrilton
CRAIGHEAD	S. W. Moreland	Jonesboro	Thad Cothorn	Jonesboro
CRAWFORD	O. M. Bourland	Van Buren	J. A. Wigley	Mulberry
CRITTENDEN	T. S. Hare	Crawfordsville	L. C. McVay	Marion
CROSS	W. H. McKie	Wynne	Thos. Wilson	Wynne
DALLAS	H. H. Atkinson	Fordyce	J. E. M. Taylor	Sparkman
DESHA	W. H. DeClark	McGehee	W. B. Grayson	McGehee
DREW	M. Y. Pope	Monticello	A. S. J. Collins	Monticello
FAULKNER	T. C. Watson	Mt. Vernon	J. S. Westerfield	Conway
FRANKLIN	E. W. Blackburn	Ozark	Thos. Douglass	Ozark
GARLAND	J. L. Greene	Hot Springs	O. H. King	Hot Springs
GRANT	Robt. L. Paxton	Thiel	Irvin Sheppard	Sheridan
GREENE	E. M. Scott	Paragould	Wm. M. Majors	Paragould
HEMPSTEAD	Don Smith	Hope		
HOT SPRING	E. T. Bramlitt	Malvern	W. G. Hodges	Malvern
HOWARD	J. S. Hopkins	Nashville	D. A. Hutchinson	Nashville
INDEPENDENCE	O. S. Woods	Salem	M. S. Craig	Batesville
JACKSON	A. L. Best	Newport	M. L. Harris	Newport
JEFFERSON	J. T. Palmer	Pine Bluff	J. C. Beard	Pine Bluff
JOHNSON	A. L. Boen	Clarksville	E. H. Hunt	Clarksville
LAFAYETTE	D. C. Nichols	Stamps	F. W. Youmans	Lewisville
LAWRENCE	J. C. Hughes	Hoxie	W. W. Hatcher	Imboden
LEE	O. L. Williamson	Marianna	W. B. Bean	Marianna
LINCOLN	J. M. McClendon	Gould	Chas. W. Dixon	Gould
LITTLE RIVER	J. W. Ringgold	Ashdown	W. E. Vaughan	Richmond
LOGAN			S. P. McConnell	Booneville
LONOKE	J. R. Cuning	Lonoke	Henry Thibault	Scott
MADISON	W. E. Acree	Huntsville	Fred Youngblood	Huntsville
MARION				
MILLER	H. E. Murry	Texarkana	Preston Hunt	Texarkana
MISSISSIPPI	L. D. Massey	Osceola	F. D. Smith	Blytheville
MONROE	L. H. Stout	Brinkley	E. D. McKnight	Brinkley
MONTGOMERY	W. D. Freeman	Mount Ida	J. H. McLean	Caddo Gap
NEVADA	W. W. Rice	Prescott	O. G. Hirst	Prescott
OUACHITA	J. S. Thompson	Stephens	R. B. Robins	Camden
PERRY				
PHILLIPS	J. W. Bean	Marvell	Geo. R. Storm	West Helena
POINSETT				
POLK	C. F. Johnson	Hatfield	F. C. Mullins	Hatfield
POPE	H. S. Drummond	Russellville	Wm. P. Scarlett	Russellville
PRAIRIE	Edward Adams	De Valls Bluff	J. R. Lynn	Hazen
PULASKI	Anderson Watkins	Little Rock	R. J. Calcote	Little Rock
RANDOLPH	R. R. Johnson	Walnut Ridge	L. R. Pace	Pocahontas
SALINE	W. S. Davis	Owensville	J. M. Phillips	Benton
SCOTT	C. Bevell	Waldron	F. R. Duncan	Waldron
SEARCY	E. W. Wood	Marshall	Sam. G. Daniel	Marshall
SEBASTIAN	J. S. Southard	Fort Smith	C. S. Means	Fort Smith
SEVIER	B. E. Hendrix	Gillham	J. C. Graves	Lockesburg
ST. FRANCIS	A. B. Caldwell	Caldwell	J. O. Rush	Forrest City
UNION	J. V. Ferguson	El Dorado	M. V. Russell	El Dorado
WASHINGTON	E. G. McCormick	Prairie Grove	P. L. Hathcock	Fayetteville
WHITE	T. G. Burge	Judsonia	Sam. J. Allbright	Searcy
WOODRUFF	J. W. Morris	McCrory	L. E. Biles	Augusta
YELL	H. L. Montgomery	Gravelly	C. B. Linzy	Plainview

THE JOURNAL

OF THE

Arkansas Medical Society

PUBLISHED MONTHLY UNDER THE DIRECTION OF THE COUNCIL

Vol. XXIV

LITTLE ROCK, ARK., NOVEMBER, 1927

No. 6

Original Articles

THE PLACE OF PITUITRIN IN OBSTETRICS*

ERNEST HARL WHITE, M. D., Little Rock

Pituitrin is one of the most rapidly acting drugs that a physician uses. It is a useful drug, but a very dangerous one at times.

Pituitrin was first used in obstetrics in 1909 by Blair Bell (1). Two years later Hofbauer (2), in Germany, recommended it highly for use in obstetrics. After Bell's favorable comment of this drug in obstetrics, its use grew rapidly in all countries. Our pharmaceutical houses vied with each other as to which could produce the most potent drug and their detail men carried its value to every practitioner in this country. At first pituitrin was used in all stages of labor with practically no contra-indications, but soon there appeared certain types of accidents which one felt sure could be justly laid to the use of pituitrin. There developed indications and contra-indications until now there are more contra-indications than there are indications for its use.

USE OF PITUITRIN IN THE INDUCTION OF LABOR AT OR NEAR TERM

Pituitrin is the chief drug used in the obstetrical department of Barnes Hospital. Henry Schwarz uses in most cases the following method of induction: Gives castor oil one ounce at 6:00 A. M.; allows patient to have tea and toast for breakfast at 7:00 A. M.; makes a vaginal examination at 10:00 A. M. to determine the condition of the cervix and if conditions are favorable, he sweeps the index finger around in the interior of the cervix in order to detach the membranes as far up as

he can reach; then follows the examination with pituitrin in two minims to $\frac{1}{2}$ cc. doses, depending on the irritability of the uterus. Doses repeated hourly till the contractions of the uterus becomes regular, then no more pituitrin is given till the placental stage.

B. P. Watson (3), formerly of Toronto, now of Liverpool, uses quinine bi-hydrochloride in addition to what Schwarz uses. His method of induction is as follows:

6:00 P. M. Castor oil, one ounce.

7:00 P. M. Quinine bi-hydrochloride, ten grains.

8:00 P. M. Soap suds enema.

9:00 P. M. Quinine bi-hydrochloride, ten grains.

12:00 P. M. Quinine bi-hydrochloride, ten grains.

If pains have not supervened by 9:00 A. M. the next morning or fourteen hours after the first dose of quinine, pituitrin $\frac{1}{2}$ cc. is given hypodermically and repeated every half hour until six doses have been given. If labor is then not definitely begun, treatment is stopped and a similar attempt with pituitrin is made the next day, and if necessary the day after that.

Watson reports successful induction in 90 per cent of 250 cases without untoward effects. J. Whitridge Williams (4) reports success by Watson's technique in 80 per cent of his cases, *i. e.*, 10 per cent less than Watson.

De Lee (5) feels that he has seen bad results from the quinine and castor oil method of induction. He asks any one thinking as he does to write him detailing the case.

I feel that pituitrin is given too frequently in Watson's technique. I prefer the dose hourly rather than every thirty minutes. Kraus (6), has shown on pithed cats that pituitrin gives strong contractions on the uterus lasting for at least an hour.

*Read before the 52nd Annual Meeting of the Arkansas Medical Society, held in Little Rock, May 11, 12, 13, 1927.

One-half cc. of pituitrin in the induction of labor before term is probably the correct dosage, but at term, I believe this dosage is too large. We all are aware of the variability of the response of the uterus to a given dose. Some uteri show little or no response, others give tremendous activity. I have seen a two minims dose give a tetanic contraction of 15 minutes at which time chloroform was given to break up the tetanic contraction. I believe small doses should be given in all cases until the susceptibility of the uterus is known.

USE OF PITUITRIN IN THE FIRST STAGE

The majority of obstetricians are now agreed that pituitrin should not be used in the first stage except for induction of labor. Prior to 1913 it was generally used by a large number of obstetricians, but during the four year period from 1909-1913, there were noticed many accidents thought to be due to the use of pituitrin, and at the American Gynecological Society Meeting in 1913, Cragin, Polack and others called our attention to the danger in the use of it in this stage. I believe the greatest danger is rupture of the uterus, badly lacerated cervix or perineum of the mother, and intracranial hemorrhage and asphyxia of the baby. Yet one finds as late as 1915 Bandler (7) of the Post-Graduate School of N. Y., using it in almost every case where there is no dystocia present. He even believes the use of pituitrin will aid to differentiate between false and true labor pains. He says if false contractions are present pituitrin would not set the patient in labor, but if true pains, the contractions would become stronger. From Schwarz, and Watson's (3) uses of pituitrin, one cannot believe that Bandler is right in this opinion.

USE OF PITUITRIN IN THE SECOND STAGE

Since Cragin's and Polack's attack on the dangers of pituitrin in the first stage, many other reports concur in their findings. The discussion in the literature soon changed to the use of pituitrin in the second stage. Tate (8) of Cincinnati, as late as 1923, is one of the chief leaders in the use of it in the second stage, even against the many reports in the literature concerning the harm that is caused by its use in this stage.

When one studies the physiology of pregnancy one thinks of the baby as immersed in the amniotic fluid. It does not breathe, nor digest, but gets its food from the mother through the placenta.

Rucker (9) has shown that pituitrin does not produce regular increased normal contractions, but rather incomplete tetanic contractions. He demonstrated graphically that there is an increase in the intrauterine pressure by connecting the interior of the uterus by a bag during labor. His hystero-grams show a total increase in intrauterine pressure, with contraction waves on top of this increased pressure. The interval of rest is shorter than are the intervals before the use of pituitrin. It is evident that such an increase in pressure decreases the area of the food supply for the baby and if continued very long asphyxia and still-birth may be produced. I have seen the fetal heart beat fall from 140 to 75 following the use of pituitrin. To the mother this rapid driving of the baby through the birth canal is apt to stretch the perineum so suddenly that it is ruptured rather than relaxed. The danger as enumerated above explains fully why asphyxia, blue babies, and intra-cranial hemorrhages are produced. I believe if the mother needs assistance in this stage, that forceps delivery is preferable to that of pituitrin, especially in hospital practice. In home practice I prefer the watchful waiting unless the baby or mother's life is endangered by waiting.

USE OF PITUITRIN IN THIRD STAGE

In the third or placental stage there is much discussion at present as to the use of pituitrin. Some hold that it is best to be given at this stage; others that it should not. I believe in well contracting uterus that it is not needed; but, as a rule, if I use an anesthetic in delivery, I put the tonic back into the uterus by the use of $\frac{1}{2}$ cc. of pituitrin. In eclampsia, or very toxic cases, I prefer some loss of blood and do not use it. In brief, I would use pituitrin in all cases following ether or chloroform anesthesia. The chief danger of giving it in this stage is hour glass contraction of the uterus and retention of the placenta. I feel that this is not to be feared very much, as the uterus can be relaxed by ether anesthesia should this occur and the placenta will come away as if no pituitrin had been given.

After delivery of the placenta, I believe that pituitrin should be given unless it was used in the third stage and this followed at once by intramuscular injection of some good preparation of ergot.

The trend in the use of pituitrin has been very similar to that of ergot, but more rapid

as to its change in use. It took almost a century for ergot to go through the first, second and third stages of labor, and now it is universally used following the delivery of the placenta and not before, if used at all.

Pituitrin has been abandoned in the first and second stages by the majority of our best obstetricians and now it is questionable if it should be used in the third stage. The next few years may show us that pituitrin should not even be used in this stage. At present we find staunch supporters of the use of pituitrin in the placental stage by such men as Seides Henry Schwarz and J. Whitridge Williams.

I feel that the use of pituitrin in this stage shortens the third stage, prevents post-partum hemorrhage; renders unnecessary uterine manipulation such as Crede or modified Crede's maneuver.

USE OF PITUITRIN IN CESAREAN SECTION

Pituitrin is used by many operators when the abdomen is opened by intramuscular injection directly into the uterus in order to lessen hemorrhage, and in contracting the uterus so as to make suturing easier. If the sutures are placed in a contracted uterus they are not so apt to tear out as when placed in a flabby organ that afterwards contracts.

Now, what is the status of the use of pituitrin among the practicing physicians of this State? I sent out two hundred questionnaires to members of our State Medical Association, who lived outside of Pulaski County and studied fifty obstetrical pituitrin records from the obstetrical department of St. Vincent's Infirmary for the present usage. The questionnaires contained the following questions:

- 1. Do you use pituitrin or pituitary extract in your obstetrical practice?
- 2. If "yes" in question 1, what stage do you use it in labor?
 - (a) In first stage.
 - (b) In second stage.
 - (c) In third stage.
 - (d) After delivery of the placenta.
- 3. What harm have you seen from the use of pituitrin?
- 4. Have you noticed any brain or cord injuries in babies in your or other doctors' practice from the use of pituitrin?"

A summary of the answers to the above questions is as follows:

Questionnaires sent out—Two hundred.
Replies received—One hundred and twenty-three.

- Replies not doing obstetrics—Ten.
- Total replies doing obstetrics—one hundred and thirteen.
- Number using pituitrin in obstetrics—One hundred and seven.
- Number using it in the first stage—Fourteen.
- Number using it in the second stage—Eighty-three.
- Number using it sometimes or occasionally—Thirteen.
- Total—96 or 90 per cent.
- Number using it in the third stage—Twenty-four.
- Number using it sometimes or occasionally—Twelve.
- Total—36 or 33 per cent.
- Number using it after the delivery of the placenta:
 - (a) Routinely—Twenty.
 - (b) Occasionally—Twenty.
 - (c) Only in hemorrhages—Twenty-four.
- Total—Sixty-four or sixty per cent.
- Number using it in Cesarean section—One.
- Number not using it at all—Six.
- Number seeing harm from the use of pituitrin—Thirty-six or 36 per cent.
- Number of injuries recorded in the replies are as follows:
 - Cord Injury—One.
 - Ruptured Uterus—Six.
 - Complete Laceration—One.
 - Too rapid delivery—Three.
 - Lacerations—Nineteen.
 - Intracranial hemorrhages—Twenty-six.
 - Rotation of occiput posteriorly—Two.
 - Torn Cervix—Five.
 - Blue Babies—Nine.
 - Post-partum Hemorrhage—One.
 - Still-birth—Three.
 - Injuries not specified—Two.
 - Premature death of baby—One.
 - Causing defective placental delivery—Two.
 - Uterine inertia—One.
 - Producing forceps case—One.
 - Stopped uterine contractions—Two.
 - Convulsion in arterial tension in mother—One.

A summary of the fifty cases from St. Vincent's Infirmary is as follows:

Number of pituitrin cases reviewed—Fifty, delivered by twenty different physicians.
Number using it in first stage—Two cases or two physicians or four per cent of the cases.

Number using it in second stage—Fourteen cases or six physicians or twenty-eight per cent of the cases.

Number using it in the third stage—Four cases or four physicians or eight per cent of the cases.

Number using it after delivery of the placenta—Three cases or two physicians or five per cent of the cases.

Number using it time not specified—Twenty-seven cases.

Induction of labor with bag and pituitrin—One case.

Fetal mortality in fifty cases—Four or eight per cent.

History of baby No. 1: Seven lbs. four ounces, baby delivered after ten doses of pituitrin of two minims each used in first stage.

Baby appeared normal at delivery, but soon developed a condition of bloody vomitus and hemorrhage from the rectum; died three days after delivery. Diagnosis: Hemorrhagic disease of the new born.

History of baby No. 2: Still-birth, full term, asphyxiated, weight of baby not recorded. Mother in labor eleven hours and five minutes. pituitrin used, stage not recorded. Fetal heart beat on entrance to Infirmary eighty-five; case brought in by local physician for Cesarean; mid forceps applied; third degree laceration.

History of baby No. 3: Weight four lbs. fourteen ounces, with weak, whiny cry, cyanotic. Thought to be premature five weeks; general contracted pelvis of mother. In labor nine hours. Baby grew cyanotic, had slight convulsions and died three hours after delivery. Pituitrin, Minims III, used in second stage of labor.

History of baby No. 4: Weight eight lbs. twelve ounces, delivered in good condition. Pituitrin, M. III, stage not recorded when given. Baby died first day. Diagnosis: "Don't know cause of death."

Morbidity—One case out of fifty; baby weighed seven lbs. thirteen ounces. Pituitrin $\frac{1}{2}$ cc. used in second stage; after delivery baby developed twitching of face and arms for a few days. Left hospital improved. Diagnosis: Intracranial hemorrhage.

CONCLUSIONS

1. Pituitrin is a dangerous drug when used indiscriminately. Its chief danger is rupture of the uterus and severe laceration of the cervix or perineum of the mother, and intracranial hemorrhage and asphyxia of the baby.

2. When used it should be in small doses, i. e., two minims at first.

3. Its use should be abandoned in the first stage.

4. It should be used with extreme care in the second stage and only then, in normal pelvis, head normal in size, anteriorly rotated and uterus atonic or lagging. Forceps delivery is preferred to pituitrin.

5. It should be used in the third stage following anesthesia and atonic uterus without anesthesia except in toxic cases. It lessens bleeding, shortens this stage and helps to expel the placenta without uterine manipulation.

6. It should be used in Cesarean section. It decreases the hemorrhage by contracting the uterus, and lessens the tear of the uterus by the sutures.

7. It should be used in all cases following the delivery of the placenta in conjunction with ergot, except in toxic cases where loss of blood is desired.

8. Pituitrin is used too frequently, in too large a dose and in too many obstetrical cases during the first and second stage of labor.

REFERENCES

- (1) BELL—British Med., Jour., 1909, Vol. 2, p. 1609-13.
- (2) HOFBAUER—Monatschr. f. Geburtch. u. Gynak., 1911, Vol. 34, p. 283-290.
- (3) WATSON—Am. Jour. Obst. and Gynec., 1922, Vol. 4, p. 603-8.
- (4) WILLIAMS—Text Book Obst. Fifth Rev. Ed. p. 429.
- (5) DE-LEE—Year Book of Obst. & Gyn., 1925, p. 127.
- (6) KRAUS—Jour. Pharmacol. and Exper. Therap., 1925, Vol. 26, p. 337-46.
- (7) BANDLER—Med. Record, 1915, Vol. 87, p. 55.
- (8) TATE—Am. Jour. Obst. and Gynec., 1923, Vol. 5, p. 252-54.
- (9) RUCKER—Jour. Am. Med. Assn., 1925, Vol. 85, p. 1637-38.

DISCUSSION

DR. G. A. WARREN, Black Rock: The essayist's last comments were well taken. I have had a few calamities from pituitrin. It is a dangerous remedy. I know of many instances where babies have been sacrificed either by cranial hemorrhage or by the placenta being detached by the tonic contractions and the child being born asphyxiated. Many, many things may happen from too severe contractions of the uterus and consequent injury to the baby; besides the possibility or probability, of a ruptured uterus and almost an assurance in the primipara of a ruptured perineum.

If you can take the selective cases, it is all right; but it is better not to use it in 100 cases than to have a calamity in one case, and that is what will happen if you use pituitrin. I know many do use it, indiscriminately, in all cases and

in all stages. To me it is a dangerous remedy in the hands even of the skilled and I don't think we can take too much precaution in using pituitrin. We have few enough babies born, and we should try to save all that are born and, if we use pituitrin indiscriminately or use too much of it, we shall get intracranial hemorrhage or compression of the brain, or get a severance of the placenta, and dire results may follow, perhaps a ruptured uterus, ruptured cervix and ruptured perineum.

DR. WHITE, in response: I might add that pituitrin is apparently taking the same course that ergot has taken, but more rapidly. It is being used now more during the placental and post-placental stages. It seems that many of our best obstetricians are using pituitrin less each year and that it will be only a short time until it will not be advocated at all in the first and second stages of labor.

INJURIES OF BILIARY TRACT*

THOS. F. KITTRELL, M. D., Texarkana

I am writing this paper at the suggestion of my friend, Dr. M. L. Norwood, with whom I saw in consultation the case I report. I am sure he could have written a much better paper than the one I am giving you, but he is so extremely modest that he insisted that I take his place.

The type of cases to which I refer are those that are produced by contusions, wounds, or injuries without penetrating the abdominal wall. These cases are comparatively rare, although I find a number reported, many of which have had enormous amounts of bile removed by tapping or drainage, and a few of the former have completely recovered. Reaction of the peritoneum to effused bile depends mainly on whether the bile is sterile; sterile bile is well tolerated. Causes of these injuries are usually forces which act in a crushing manner, such as a blow, on abdomen, or the passage of a wagon wheel over it. Injury of the ducts is usually accompanied with injury of the gall-bladder. Symptoms are usually pain, shock, peritonitis, ascites, acholia, jaundice, cholemia and inanition. Shock is generally well marked and reaction slow. It would seem that complete division of the common duct would result fatally, if not operated; but few supposed cases have recovered.

Buchanan, J. J. (1), says that Fryer (2) in 1813, reported a case of a boy of 13; blow over liver; jaundiced, acholic stools; tapped three times, 13 pints on 21st day; 15 pints on 33rd day, on 42nd day 6 pints; recovery;

well ten years later. Barlow, in 1844, reported a case of a man injured lifting heavy ladder. Six weeks after injury, tapped, removing 7 quarts; again 54th, 64th, 73rd, 81st, 91st days, total amount of bile removed, 32 quarts averaging more than 10 ounces a day during the entire 13 weeks. Recovery complete in five months.

Bargellini (3) in 1897, reported case of young man who fell against fountain. Three and a half months after injury abdomen full of liquid. He was tapped and ten liters ochre, yellow fluid removed; patient recovered without further tapping.

Rudberg (4) compares a case personally observed with 41 he has found on record, and refers to Amante's compilation of 101 cases of rupture from contusion plus 25 cases of stab wound of the gall-bladder. The ages ranged from 20 months to 60 years. In the 7 cases in which no operation was attempted, death followed in from half an hour to eight weeks, as also in five of the six cases in which the abdomen was merely punctured. In the sixth case in this group, the young man recovered after a right pleuritis. The puncture three days after the accident had released three-fourths liter of a bile-stained fluid; but in two months recovery seemed complete.

In Garre's case (5) the ruptured hepatic duct was sutured, and a year later a new operation was required on account of cicatricial stenosis in the man of 37.

In Rudberg's own case, the rupture was in the common bile duct. Although the access was ample for suture, it was not attempted for fear of stenosis later, and spontaneous healing was hoped for. A drainage tube was placed at the point of the rupture and another at an adjacent loop of bowel showing fresh fibrin deposits. The abdomen was then sutured; the tubes were removed the sixth day. The flow of bile gradually declined, and the patient was dismissed in two months, although a third month elapsed before the seeping of bile into the dressing had entirely ceased. The man felt well all the time and has never had any symptoms from the biliary apparatus during the four years since. The diagnosis at first had been rupture of the bowel, and the median laparotomy had to be supplemented by a second incision below the right diaphragm.

Fulle (6), found that the length of survival of the dogs and rabbits was not proportional to the amount of bile that had escaped into the peritoneum, but seemed to depend on whether

*Read before the 52nd Annual Meeting of the Arkansas Medical Society, held in Little Rock, May 11, 12, 13, 1927.

the bile had been in contact with the peritoneum for any length of time. Sudden flooding of the peritoneum with bile from a large incision in the gall-bladder or by injection of bile taken directly from the gall-bladder of another animal proved constantly fatal. On the other hand, even larger amounts, if oozing gradually from a small incision, were borne much better, and bile pigments appeared in the urine. Bile taken directly from the gall-bladder proved much more toxic when injected by the vein in other animals than extravasated bile taken from the peritoneum. The peritoneum seems to be able to neutralize the toxicity of the bile. The suprarenals seem to suffer first and most from toxic action of the gall-bladder bile.

Case, R. M. C., well developed child two years of age on September 22, 1926, both wheels on one side of wagon loaded with bale of seed cotton passed over his body at about level of lower ribs. Only visible signs of injury was contusion on back at level twelfth rib on right side. When seen by Dr. M. L. Norwood one hour later, temperature was normal, pulse 120, respiration 20. No great amount of pain, complained some of pain on inspiration, no abdominal distention, no rigidity, not much shock. On third day some abdominal distention, temperature 100, pulse 120, no pain, vomited twice. Bowels moved on fourth day without cathartic, slight temperature three or four days, child occasionally vomited, skin became jaundiced, stools clay color and putty like. October 18th, or twenty-six days after injury, I saw the case with Dr. Norwood, the patient was pale, very fretful, emaciated, had a decided icterus, stools were then clay colored, pulse rapid, temperature slightly above normal, abdomen very much distended, and marked dullness on percussion, especially in flanks and lower abdomen. We tapped abdomen on left side about left semilunar line and about on level of navel, removing about half gallon of dark green fluid apparently bile. On October 25th, 30th, November 5th, 11th, Dr. Norwood tapped patient, getting same amount and same colored fluid. On November 17th he got less, color of fluid lighter. On November 19th slight amount of color appeared in stool. This continued to increase, the child slowly began improving, appetite and digestion better, color cleared up, gained strength. He was able to walk about by January 15th. There was removed from his abdomen, about two and three-fourths gallons of fluid that looked like bile. This would be

seven or eight ounces a day for the period between injury and last paracentesis.

When I saw this child I thought he would surely die as I felt that his symptoms and physical signs indicated injury (probably complete severance of the common duct). It is my belief that these cases as a rule should be operated on immediately either by removal of gall-bladder and drainage if the gall-bladder is ruptured, or with simple drainage down to the point of injury, if the injury is to the ducts.

In the case reported above the patient did not have serious symptoms at first and was many miles from a hospital. He probably did just as well as he would have done with any other kind of treatment. After they have gone on for 20 or 30 days the only thing one could do, if the abdomen were opened, would be to drain; as the adhesions would make it very difficult to locate or close an old fistulous tract. However, drainage even later is as a rule better.

In children the bile is usually sterile, as they do not often have an infection of the gall-bladder and ducts. In children ducts are so small and obscured by blood and bile that this makes repair of the wounds very difficult, and as we know that wounds of the ducts frequently heal spontaneously without a suture, mopping out the locality and drainage is probably best.

Since writing the above history I have heard from this case. He occasionally becomes jaundiced and has at these times a hard swelling in region of convex surface of liver.

BIBLIOGRAPHY

- (1) Buchanan, J. J. Bile Peritonitis without evident Perforation of the Biliary Tract. *S. G. O.*, 1918, 26, 303.
- (2) Fryer, Med. Chir. Soc. Tr., London, 1813, 4, 330 Quoted by Buchanan, *S. G. O.*, 1918, 26, 308.
- (3) Bargellini, *Riforma Med.*, 1897, 3, 214 quoted by Buchanan, *S. G. O.*, 1918, 26, 303.
- (4) Rudberg. Traumatic Rupture of the Biliary Passages. *Ab. J. A. M. A.*, 1922, 79, 1562.
- (5) Garre, Rupture Hepatic Duct. Quoted by Rudberg, *J. A. M. A.*, 1922, 79, 1562.
- (6) Fulle, G. B. C. Experimental Injury of the Gall-Bladder, *Ab. J. A. M. A.*, 1922, 78, 250.

DISCUSSION

DR. M. L. NORWOOD, Lockesburg: Dr. Kittrell reported a case; but it is a question in my mind whether it should have been operated. Immediately after the injury, I asked for a consultation with a surgeon; but it was refused. I think that it was fortunate that it was refused; because, in my opinion, it was never an operable case, and the child is apparently well today.

DR. E. E. BARLOW, Dermott: Dr. Sanders of Memphis, Tenn., is here today. I move the courtesy of the floor be extended to him. (Carried.)

DR. R. L. SANDERS, Memphis: I thank you for the courtesy extended me on this occasion.

I desire to say a few words in the discussion of Dr. Kittrell's most interesting paper. His paper attracted my attention especially because of my interest in injuries and diseases of the biliary system. Dr. Kittrell spoke only of traumatic injuries independent of surgical interference. I had hoped he would speak also of surgical injuries.

The case reported is of unusual interest. His review of the literature is very thorough and illuminating. Our interests should all be renewed after this presentation. It is my purpose to speak only of the injuries incident to surgical procedures.

In former years many gall-bladders were drained, whereas now a large per cent of them are removed entirely. During cholecystectomy there is a greater liability of injury to the ducts than there is in simple drainage. Some years ago a case of unusual interest was reported in the *British Surgical Journal*. It was a congenital stricture of the common duct at its outlet. A large bile cyst formed in the proximal dilated portion. It was mistaken for an ovarian cyst. At operation the surgeon recognized the true condition, anastomosed the dilated common duct to the duodenum and cured the patient. Some three years ago a patient was admitted on my service at the Baptist Hospital. She had previously undergone an operation for the removal of gall-bladder on account of infection and stones. Stones were removed from the common duct also. Later the duct became strictured at the operative site and chronic obstructive jaundice developed. The proximal end of the duct dilated and a large bile cyst formed. It was necessary to anastomose the duct to the duodenum to effect a cure.

I wish to call especial attention to the accidental injury of the common duct, or hepatic duct, during the process of removal of the gall-bladder. In removing the organ from below up, one can notice that the gall-bladder pelvis overhangs the common duct. If a pair of forceps is so placed that the pelvis can be elevated, and the gastro-hepatic ligament is divided, then the common duct and cystic duct may be easily exposed. Injuries rarely occur if the ducts are well exposed before they are cut.

Infection and the sloughing of stones in the duct may result in stricture formation that cannot be distinguished from that produced by accidental injury.

A few years ago I reviewed 51 cases of strictures of the common duct secondary to injury. Many of these cases came from elsewhere on account of chronic jaundice secondary to the obstruction. We considered the condition quite a serious one and the operation to reconstruct the duct a very formidable one. During the past eight years I have had the privilege of operating on seven or eight such cases. They are anything but easy. Such an operation will tax the skill and ingenuity of most any surgeon.

The best remedy is prevention. This can be done by early recognition of gall-bladder disease and early operation before so much inflammatory changes have taken place. The identification of the ducts is easy in most early cases. My plea is therefore for earlier cholecystectomy. This will not only lessen the duct injuries, but it will spare the liver and pancreas the secondary impairment of function.

This question of injury to the biliary ducts is of tremendous importance and I am glad of the opportunity of saying a few words at this time. I wish again to thank Dr. Kittrell for presenting this most timely subject.

Abstracts

INCREASING MORTALITY FROM HEART DISEASE

Four reasons are suggested by Henry Albert, Des Moines, Iowa (*Journal A. M. A.*, Oct. 15, 1927), as accounting at least in part for the increase in the number of deaths from heart disease noted during the last thirty years. 1. The increase in the number of persons who live long enough to attain the "heart disease" age. More persons than ever before are now attaining the age of 45 years and over. Mortality in heart disease occurs chiefly after that age. 2. Decrease in the number of deaths from infectious diseases, especially tuberculosis. Every person succumbs to some disease accident or old age. If, during the course of years, the death rate per given age group from certain diseases is reduced, persons attaining that age group are more likely to die in increasing numbers from some other disease. With advancing years, many of the cases of the "some other" disease are likely to be heart disease. 3. Old age, which may account for a slightly increasing number of cases that may properly be regarded as resulting from a normal senescent process. 4. Increase in the proportion of the population "maimed" by certain infectious diseases. Heart disease is in large part the result of injury to that organ by an infection which occurred some, or indeed, many, years previously. Whereas, the morbidity rate for scarlet fever and probably also acute rheumatic fever is practically the same today as it was twenty or more years ago, there has been a decided reduction in the mortality rate. Many of those who survive an attack of scarlet fever or acute rheumatic fever are more or less maimed by it. On that assumption, there is now and has been for some years past an increase in the proportion of the population which has been "maimed" by conditions likely to lead to heart disease.

THE JOURNAL

OF THE

ARKANSAS MEDICAL SOCIETY

Owned by the Arkansas Medical Society and Published
under the direction of the Council.

WILLIAM R. BATHURST, Editor
810-812 Boyle Building, Little Rock, Arkansas.

Published Monthly. Subscription \$3.00 per year; single
copies 25 cents.

Entered as second-class matter, June 21, 1906, at the
postoffice at Little Rock, Arkansas, under the Act of
Congress of March 3, 1879.

Acceptance for mailing at special rate of postage pro-
vided for in Section 1103, Act of October 3, 1917, autho-
rized August 1, 1918.

The advertising policy of this Journal is governed by
the rules of the Council on Pharmacy and Chemistry of
the American Medical Association.

All communications of this Journal must be made to it
exclusively. Communications and items of general inter-
est to the profession are invited from all over the State.
Notice of deaths, removals from the state, changes of
location, etc., are requested.

OFFICERS OF THE ARKANSAS MEDICAL SOCIETY

HENRY THIBAUT, President.....	Scott
R. H. T. MANN, President-Elect.....	Texarkana
HOMER SCOTT, First Vice-President.....	Little Rock
J. B. WHARTON, Second Vice-President.....	El Dorado
O. J. T. JOHNSTON, Third Vice-President.....	Batesville
R. J. CALCOTE, Treasurer.....	Little Rock
Wm. R. BATHURST, Secretary.....	Little Rock

COUNCILORS

First District—W. W. VERSER.....	Harrisburg
Second District—J. L. JONES.....	Searcy
Third District—M. C. JOHN.....	Stuttgart
Fourth District—W. T. LOWE.....	Pine Bluff
Fifth District—L. L. PURIFOY.....	El Dorado
Sixth District—B. C. MIDDLETON.....	Texarkana
Seventh District—DEWELL GANN, SR.....	Benton
Eighth District—ANDERSON WATKINS.....	Little Rock
Ninth District—SAM G. DANIEL.....	Marshall
Tenth District—THOMAS DOUGLASS.....	Ozark

It was called to our attention recently by a manager of a large insurance firm here that he had interviewed several members of this Society who were ex-service men and who had not yet applied for their Adjusted Service Certificates commonly called the Bonus Insurance. The last date on which this can be done is December 31st, of this year. Do not confuse this with the insurance you had while in the service or the compensation the Veterans Bureau gives for disability. This is a paid-up insurance policy given to all ex-service men as a bonus. You may obtain information and application blanks from Mr. Walkup, Medical Section, U. S. Veterans Bureau, Little Rock.

Editorials

52 YEARS OLD AND GOING STRONG

On October 12-13 the Arkansas Medical Society attained its fifty-second birthday. Inasmuch as the youngest of the charter members must have been in his twenties when the society was organized, there naturally are but few survivors and among those few are two of our beloved ex-presidents, Dr. H. D. Wood of Fayetteville and Dr. Jas. H. Lenow of Little Rock, both active and in good health, and we hope, good for years to come. The editor esteems it a great and rare privilege to learn from the surviving members something of the beginnings of the society, its lowly, struggling days, the rocky roads it has had to travel and its steady growth and progress up to the present time. The old road from then till now has not been a smoothly paved highway. It has been marked by many steep grades and sharp curves, sometimes difficult to negotiate; but steadiness of purpose, loyalty to its aims prevailed and helped to make the society virile.

The first organization had a membership of 200, with Dr. W. B. Welch of Fayetteville, president. Elsewhere in this issue of the Journal is published the roster for 1927, consisting of 1,240 members made up of the reputable progressive physicians of Arkansas.

It would require more space than can be spared to recount in detail the accomplishments of the Society during the more than half a century of its existence; but it has steadily grown in its efforts, individually and by concerted action, to achieve a better, safer, healthier State in which to live. Compare the sanitary conditions today with those of fifty years ago, improved conditions brought about both by laws secured through the efforts of the society; compare the disease preventive measures of today and of the past, note the work of malarial elimination, of the measures taken to prevent the spread of contagious diseases, the decreased mortality statistics. In all these factors in the improved health conditions may be traced the work of the Arkansas Medical Society, operating through the Board of Health, the Legislature and by individual effort. Looking upon this present day picture, and that of the earlier years, the Society may well be satisfied with the accomplishments of the past, and be in a position to plan greater

things for the future. We expect to grow alike in number and influence, in strength and efficiency as the years go by.

Within a few years our income will permit the employment of a full time secretary. It will then be possible to secure experienced teachers and speakers for our meetings. It is hoped to have a fund sufficient to assist the medical Examining Board in ferreting out and prosecuting irregular practitioners and to foster the establishment of periodical health examinations and eventually to secure a permanent building for the home of the Arkansas Medical Society.

Perhaps some generous medical soul will be moved to donate a fund with this object in view.

TIRED?

"Just one more round," is one of the best-known phrases in Americana. To the loser it means hope, to the cartoonist it means a new idea, and for many a wife it means another hour of sentry duty.

To the doctor, however, it means "fatigue" and the many diseases to which it opens the way, such as heart, kidney and nervous diseases, chronic digestive disturbance, and tuberculosis. Curiously enough, the most terrible of these diseases is the one that may be arrested most readily if it is discovered in time. It is tuberculosis.



The National Tuberculosis Association, which has been combating this disease for many years, says that fatigue is the entering wedge in practically every case. The fatigued body has a greatly reduced resistance to diseases in general, but to tuberculosis in particular, because so many persons carry tubercle bacilli about in their bodies in a dormant state. The deadly germs await only the opportunity to become active; so a chronically tired person is a ready-made victim.

Fatigue also has its mental aspect, for the exhausted worker is very likely to become the negligent father who has little will-power or

energy left to interest himself in the details of family life and to maintain standards of conduct which make for decent home life. A lowered standard of living, which is bound to follow, is conducive to disease, so it is not uncommon for tuberculosis workers to find, in such a sub-standard family, that the father has an active case of tuberculosis, while several of the children have contracted it from him. A single such family, if they remained undiscovered, may infect others in the community in which they reside, by careless disposition of their sputum, promiscuous spitting and failure to cover their faces when coughing or sneezing, at the factory, in school, on street cars or buses, in stores, theatres, and movies, all because one man carelessly let fatigue get the better of him.

Tuberculosis workers, in seeking out such families—and we have an astounding number throughout the United States—are protecting the entire community. The local tuberculosis association for which they work is a voluntary, unofficial organization supported by the sale of Christmas seals each December. They protect YOU.

The morals are two: Avoid fatigue all year round; and, buy Christmas seals in December.

PUBLICATIONS AND PUBLICATIONS

Many Arkansas physicians have recently received letters asking their endorsement of the McFadden publications—and their name is Legion. Some of these literary effusions have been the butts of ridicule and sarcastic writers of the common type and it is fervently hoped that no reputable physician will, by indorsement of them, fall into a trap so thinly disguised.

Now there is another sort of publication which the Arkansas Medical Society earnestly hopes its members will indorse and indorse unqualifiedly. That is *HYGEIA*, that splendid child of the American Medical Association, a copy of which should be in every home in Arkansas. The Pulaski County Auxiliary has subscribed for fourteen copies to be sent to rural schools and the Arkansas Medical Society has sent complimentary copies to the county superintendent of the public schools. United efforts by the ladies of the Auxiliary can extend this plan of lay education to a very great advantage.

If a physician indorses any sort of publication, let it be something worth while and in the interest of the public health and welfare.

Editorial Clippings

A NEW METHOD OF MEDICAL LICENSURE—THE BASIC SCIENCE LAWS OF WISCONSIN, CONNECTICUT, WASHINGTON AND MINNESOTA

In 1920, Doctor O. B. Bock of SheyboGAN, Wisconsin, started an agitation in his State in favor of a new method of medical licensure. In 1921, he was instrumental in having a bill covering the essentials of the present Wisconsin basic science law for practitioners of the healing art, introduced into the Wisconsin Legislature. It did not go to passage that year; and in 1923 it again met with defeat. But in 1925 the measure became a law, with only four dissenting votes in the Legislature! The act went into effect on June 12, 1925.

Wisconsin's interest in such a measure arose largely from the activity of chiropractors, who in 1915 secured a law in Wisconsin, whereby they could practice unmolested, provided they did not hold themselves out before the public as licensed or registered physicians; about two hundred having entered the State every year to take up their practice.

Seventeen days after Wisconsin secured its law the State of Connecticut placed a similar act on its statute books. Wisconsin and Connecticut acted independently and without conference in securing their respective laws, and were led to their action because of quite different causes. In Connecticut a "diploma mill" scandal had arisen in connection with one of the cultist boards, and after the expose the State had risen in its wrath, had instituted a house cleaning and the Connecticut basic science law was the result. As a result of the investigation, in which the State Medical Society, the governor, a grand jury and lay citizens all lent their aid, a total of 168 licenses were revoked, about three-fourths of this number being held by persons who were practicing in other States.

In the bill it was stated that "The examination shall be so conducted as not to discriminate against the particular views of any *bona fide* organization, sect or school, as to any remedies or treatment or any system of therapeutics."

What is the essence of a basic science law, and why did its acceptance seem a rational

method of procedure for the States which have adopted it since the first of such laws was passed in 1925?

A basic science law is founded on the proposition that a patient who consults a practitioner of the healing art may be suffering from a disease in which serious danger to health and life may be involved. The citizen who is such a patient has a right to expect that the State will protect him from incompetent advice; or at least that the State will safeguard his health and life interests by insisting that all practitioners of the healing art, no matter to what so-called school of healing belonging, should have those certain minimum qualifications in preliminary education and in professional training, that would make each such practitioner possess that fair amount of technical knowledge which should be expected and demanded of any man holding himself before the public as competent to treat injury or disease by this, that, or the other methods.

The fundamental or primary subjects having to do with the practice of the healing art are construed in most of these basic science laws, to include: anatomy, physiology, chemistry, bacteriology, pathology, diagnosis and hygiene.

These are the subjects that are usually called the basic sciences. It is worthy of note that not one of these subjects has to do with methods of healing, but each is construed to be very proper knowledge which every practitioner who wishes to claim ability to treat injury or disease by any method whatsoever should possess.

In these basic science acts there is no definition of the "practice of medicine" but there is a definition of the "practice of the healing art," somewhat as follows: "For the purposes of this act, any license authorizing the licentiate to offer or undertake to diagnose, treat, operate on or prescribe for any human pain, injury, disease, deformity or physical or mental condition is a license to practice the healing art."

This definition is purposely made almost all-inclusive, but the various bills exempt by special sections, such groups as dentists, midwives, nurses, optometrists, and religious healers.

It is usually stipulated that the boards of examiners shall consist of three to five members, usually laymen, sometimes professors or teachers in liberal arts departments of colleges or universities within the State, and so

on. The board is given authority to employ assistants to help carry on the examinations.

In Wisconsin the basic science board "shall consist of three lay educators, none of whom shall be on the faculty of any department teaching methods of treating the sick."

In Connecticut the first board appointed by the governor had as one of its members the professor of philosophy at Yale University, as the second an ex-judge, and as the third the chief executive of a large and prosperous manufacturing company. Dr. R. L. Rowley, secretary of the Connecticut Medical Examining Board, states that the basic science board conceived "its intended function as a board of elimination, to be a coarse sieve through which applicants for a license to practice the healing art must first pass with consequent elimination of the obviously unfit." A certificate from this basic science board is prerequisite to examination by any one of the six separate Connecticut medical, homeopathic, eclectic, osteopathic, chiropractic, or naturopathic boards.

In Washington the board of five members comes from the faculties of the University of Washington or Washington State College.

In Minnesota the board consists of professors from any university or college in Minnesota.

Provisions are made in these acts as regards: Organization of the boards, fees to be paid by applicants, examinations and the passing standards required, requirements for a certificate, reciprocity, appeal to the courts from the board's decision, illegal certificates, fees paid unauthorized practitioners recoverable, enforcement, exceptions, saving clause, and so on.

On the subject of the requirements which must be met by anyone who would take a basic science examination, the following could be quoted: "No certificate shall be issued by the State board of examiners in the basic sciences unless the person applying for certificate submits evidence satisfactory to the board: (1) that he is not less than twenty-one years of age; (2) that he is a person of good moral character; (3) that he was graduated by an accredited high school or school of similar grade, or possessed educational qualifications equivalent to those required for graduation by such an accredited high school before he began the study of the healing arts, and (4) that he has a comprehensive knowledge of the basic sciences as shown by passing the exami-

nation given by the board, as by this act required.

"Comment: No evidence is required of the applicant of the extent and nature of his knowledge of the basic sciences. These are to be determined by the board of examination. The professional licensing board to which the applicant must subsequently apply for his license to practice is to be at liberty, it is proposed, to accept the findings of the State board of examiners in the basic sciences with respect to the proficiency of the applicant in those sciences or to re-examine the applicant in those sciences on its own account."

From the foregoing it is seen that the medical, osteopathic, chiropractic and other examining boards existing in a State are not wiped out of existence but are permitted to carry on in line with the preceding paragraph.

In similar manner, no practitioner of the healing art licensed in a State at the time of the enactment of a basic science law is deprived of any of his previous rights to practice.

A very interesting section is that which proposes to deal with a new type of penalty for the unauthorized practitioners. It reads: "Any money paid out by any person as compensation for services rendered in the practice of the healing art or any branch thereof to any person not validly licensed to practice such healing art or branch, when the payor did not know that such person was not validly licensed so to practice, may be recovered by the person who had paid such money by a suit instituted within two years from the date when such fee or compensation was paid.

"Comment: One who practices the healing art or any branch thereof unlawfully cannot now obtain the aid of the courts in collecting money for his unlawful act. This section proposes merely to permit one who has innocently paid money for such unlawful services to recover it by suit."

From what has been here written, it is noted that these basic science laws in these different States show quite a different method of approach to the whole subject of licensure of practitioners of the healing art than has been the vogue in the past. These basic science laws are startling in this pronounced variation from established methods, and startling also in their simplicity and logic.

That four States in two years should have passed such laws, and that other States have such proposed laws under consideration,

should make the whole subject of interest to all physicians who desire to keep in touch with legislative matters having to do with the healing profession—California & Western Medicine, October, 1927.

Abstracts

GELATIN ADDED TO DIETS OF ARTIFICIALLY FED INFANTS

The general plan of the work done by Julius H. Hess and I. McKy Chamberlain, Chicago (Journal A. M. A., Oct. 22, 1927), was as follows: All feedings were made with fresh cow's milk, boiled water and granulated sugar. Cow's milk to approximate 2 ounces per pound of infant body weight was fed daily. Water was added to make the total daily fluid approximate from $2\frac{1}{2}$ to 3 ounces for each pound of body weight. Sugar was added to this in amounts approximating one-tenth ounce per pound of body weight. The mixture was boiled for three minutes. All infants were fed every four hours, receiving five or six feedings in twenty-four hours. Throughout the study cod liver oil was given, 1 teaspoonful daily to babies from 1 to 3 months of age, and 2 teaspoonfuls daily after the third month. Orange juice was also given throughout the study, 1 ounce being given daily for each 16 ounces of milk used in preparing the formula. During the first one or more weeks, which the authors refer to as the control period, the infant was placed on a formula determined by the aforementioned standards. During this period the infant was carefully checked until it was certain that the child might be passed as an average, normal, artificially fed infant. The mother was interviewed and carefully instructed, after which, if she failed to cooperate, her infant was dropped from this special study group. As soon as the infant was taking the full formula and making satisfactory progress, one of two additions was made: (1) either 1 per cent of gelatin measured against the milk in the mixture, or (2) raw egg yolk in amounts having approximately the same caloric value as the gelatin. The authors calculated the value of one average raw egg yolk as 68 calories and considered this to equal 20 Gm. of gelatin in food value. The amount of orange juice given in all periods was a constant throughout, 1 ounce being given for each pint of milk used in the day's formula. In the control and gelatin feeding

periods, it was given between feedings. During the time when egg yolk was added to the formula, the orange juice was added to the mixture. In the latter, both the orange juice and the egg yolk were added to the milk mixture after it had been boiled and cooled. Gelatin or orange juice and raw egg yolk were added to the formula in most instances for alternate periods of approximately three or four weeks. Cooked cereal was added to the infant's diet as late as the individual case warranted. The cereal, when fed, was reported in terms of carbohydrate added. On the gelatin-milk mixture there was an average gain of 6.44 ounces a week. On the egg yolk-orange juice milk mixture there was an average gain of 6.46 ounces a week. In summarizing the results on the gelatin mixture it was concluded that there was a tendency toward the formation of rather foul smelling, firm stools which were grayish yellow and which at times were passed with difficulty. With the egg yolk milk mixture with orange juice added in the formula rather than between feedings, although not universally true, the stools were of a canary color and more plastic.

Personal and News Items

Dr. and Mrs. Walter G. Allison of Hope were recent visitors to Little Rock.

At a recent meeting of the First Councilor District Medical Society held in Paragould the following officers were elected: F. M. Scott, Paragould, president; J. J. Hudgins, Marmaduke, vice-president; W. W. Verser, Harrisburg, councilor (re-elected); W. M. Majors, Paragould, secretary and treasurer (re-elected). Jonesboro was selected for the spring meeting in 1928.

WANTED—Salaried appointments for Class A Physicians in all branches of the medical profession. Let us put you in touch with the best man for your opening. Our nation-wide connections enable us to give superior service. Aznoe's National Physicians' Exchange, 30 North Michigan, Chicago. Established 1896. Member the Chicago Association of Commerce.—(Adv).

Dr. Preston Hunt of Texarkana was a recent visitor to Little Rock.

The White County Medical Society elected the following officers for 1928:

Col. Frank Vinsonhaler of Little Rock was recently elected President of the Arkansas Reserve Officers' Association.

President, L. E. Moore, Searey; Vice-President, S. J. Albright, Searey; Secretary and Treasurer, F. P. Hardy, Center Hill; Delegate to State Meeting, S. J. Albright, Searey; Alternate Delegate, J. B. Havner, Beebe.

We regret to announce the death of Miss Irl Gann, daughter of Dr. and Mrs. Dewell Gann, Sr., of Benton.

The following officers were elected at recent meeting of the Woman's Auxiliary of Pulaski County Medical Society: President, Mrs. J. C. Cunningham; Vice-President, Mrs. Stacy Howell; Treasurer, Mrs. R. E. Pryor; Historian, Mrs. T. M. Fly; Parliamentarian, Mrs. Pat Murphey; Secretary, Mrs. B. A. Rhinehart, all of Little Rock.

Dr. and Mrs. Robert Caldwell of Little Rock have returned from a recent visit in Chicago.

POSITION WANTED—By competent woman physician with proctologist or on hospital staff or with busy physician. Address 810, in care Journal, Arkansas Medical Society, Boyle Bldg., Little Rock, Ark.

INFORMATION WANTED—Of an Arkansas town needing a capable physician. Address 812, in care Journal, Arkansas Medical Society, Boyle Bldg., Little Rock, Arkansas.

WOMAN'S AUXILIARY TO THE ARKANSAS MEDICAL SOCIETY

Reported by Mrs. Nellie Thomson Rhinehart
State Publicity Secretary

STATE NEWS

The executive board of the Arkansas Medical Society Auxiliary met at lunch, October 26, 1927, at the Peacock Tea Rooms, Little Rock.

Those present were Mesdames C. T. Drennen, Grayson Tarkington and E. L. Thompson of Hot Springs; Mesdames Barton A. Rhinehart, J. C. Cunningham, C. E. Oates, C. W. Garrison and L. D. Reagan of Little Rock, Mrs. T. G. Porter of Hazen, Mrs. C. G. Hinkle of Batesville and Mrs. I. N. McCollum of Conway.

Mrs. C. T. Drennen, President of Hot Springs, presided.

COUNTY REPORTS

Mrs. I. N. McCollum of Faulkner County, reported monthly meetings held by her auxiliary. Health work is being stressed and among the members 80 per cent subscribe to *Hygeia*.

Mrs. C. G. Hinkle reported monthly meetings being held in Independence County and 101 cases examined at a clinic conducted at the county fair.

Mrs. T. G. Porter of Prairie County, reported health work stressed at the monthly meetings.

Mrs. J. C. Cunningham reported for Pulaski County the health program for the summer. Maternity kits have been made as samples by Pulaski County Auxiliary for the use of Public Health and Red Cross nurses.

Samples will be sent to county auxiliaries on request. Mrs. L. D. Reagan of Pulaski County urged that help be given to rural districts, which are handicapped in their health work by shortage of equipment.

Mrs. C. T. Drennen then presented her appointments for standing committees for acceptance.

List of committees include:

Organization: Mrs. C. G. Hinkle, Chairman, Batesville; Mrs. P. E. Thomas, Clarendon; Mrs. E. A. Callahan, Carlisle; Mrs. G. C. Debolt, El Dorado and Mrs. E. F. Ellis, Fayetteville.

Education and Public Health: Mrs. J. H. Chesnutt, Chairman, Hot Springs; Mrs. J. B. Wharton, El Dorado; Mrs. Dewell Gann, Sr., Benton; Mrs. A. E. Chace, Texarkana and Mrs. A. M. Kitchens, Waldo.

Constitution and By-Laws: Mrs. S. A. Colom, Chairman, Texarkana.

Memorial: Mrs. L. D. Reagan, Chairman, Little Rock; Mrs. G. S. Brown, Conway; Mrs. J. R. Lynn, Hazen.

Public Relations: Mrs. C. W. Garrison, Chairman, Little Rock; Mrs. J. H. Kennerly, Batesville; Mrs. Wm. R. Bathurst, Little Rock; Mrs. S. A. Drennen, Stuttgart; Mrs. C. A. Areher, DeQueen.

Music: Mrs. L. L. Purifoy, Chairman, El Dorado; Mrs. W. R. Richardson, Little Rock; Mrs. Geo. B. Fletcher, Hot Springs.

Mrs. L. D. Reagan as chairman of Memorial Committee was instructed to telegraph our sympathy with Mrs. Dewell Gann, Sr., on the death of her daughter, Irl, and to Mrs. J. M. Phillips, also of Benton, on the death

of her husband. Resolutions were spread upon the minutes to this effect.

RESOLUTIONS OF RESPECT ON THE DEATH OF DR. J. H. PHIPPS

Whereas, Almighty God in the Divine dispensation of his Omniscience, has seen fit to call from our midst our fellow practitioner, Dr. J. H. Phipps; and,

Whereas, our fellow physieian, Dr. J. H. Phipps, during the many years that he followed his profession, has conducted himself in accordance with the standards and ethies thereof; and,

Whereas, our associate, Dr. J. H. Phipps, has, at all times earned the respect of the profession and of the community in which he resided, and has at all times lent himself to the upbuilding of the profession and of the community.

Now Therefore, be it Resolved, by the Monroe County Medical Society, that we, as a society, greatly deplore the loss of our deceased comrade; that in his death our organization has lost a worthy and faithful member, and our community a public spirited and valuable citizen; that we extend to his surviving relatives our sincerest sympathy; that a copy of these resolutions of condolence be recorded in the minutes of this Society; that a copy of same be published in the Journal of the Arkansas Medical Society, and a copy of same be furnished to the relatives of the deceased member.

Respectfully submitted,

A. H. GILBRECH,

W. L. BOSWELL,

Committee.

TRI-STATE MEETING

Tri-State Medical Society, which includes Arkansas, Louisiana and Texas will meet in Shreveport, Louisiana, January 16-17, 1928.

The program is now being prepared, and the Section Chiefs are busy securing the best papers to be had. Already, a good program is in the nueus, but there is room for some more papers. Should you desire to appear on this program, write any of the following Section Chairmen:

Surgery—Dr. Preston Hunt, Texarkana, Texas.

Medicine—Dr. Arthur A. Herold, Shreveport, La.

Gynecology—Dr. Chas. H. Mosely, Monroe, Louisiana.

Eye, Ear Nose and Throat—Dr. W. G. Hartt, Marshall, Texas.

Urology—Dr. I. B. Rougon, Shreveport, La.

Pathology and Bacteriology—Dr. Nettie Klein, Texarkana, U. S. A.

Miscellaneous Topics—Dr. J. J. Terrell, Dallas, Texas.

Be sure to arrange your work so that you can be with us on these dates, for besides the wonderful program, the special social features will have a prominent place.—Frank H. Walke, Seeretary, Shreveport, La.

Obituary

PHILLIPS, JOHN MORGAN—John Morgan Phillips, M. D. of Benton, died October 19, 1927. Aged 56. His death followed an illness of several weeks. Dr. Phillips was at one time a member of the Examining Board of the State Medical Society. He also was secretary of the Saline County Medical Society.

Surviving are his wife, Mrs. Mabel Phillips; one son, John Shepherd Phillips; mother, Mrs. R. P. Phillips, Benton; Sister, Mrs. G. M. Ewing, McGehee; two nephews and two nieces.

THE PHYSICIAN

His stethoscope to beating heart,

Percussion over lung,

Blood pressure, pulse and temperature,

A brief view of your tongue,

A question here, a symptom there

Make diagnosis plain;

With potion, powder, salve and pill

He thwarts the Reaper's game.

—Margaret Helen Florine, R. N.

List of Members of the Arkansas Medical Society for 1927

ARKANSAS COUNTY

Dickens, Homer	DeWitt
Drennen, S. A.	Stuttgart
Fowler, Arthur	Humphrey
John, M. C.	Stuttgart
Lowe, W. W.	Gillett
Lumsden, C. A.	DeWitt
*Moorhead, W. H.	Stuttgart
*Morphew, L. H.	Stuttgart
Neighbors, J. E.	Stuttgart
Park, Chas. E.	DeWitt
Rasco, C. W.	DeWitt
Riley, H. C.	Bayou Meto
Strait, C. W.	Stuttgart
Swindler, E. B.	Stuttgart
Whitehead, R. H.	Gillett
Winkler, E. H.	DeWitt
Word, J. F.	St. Charles

ASHLEY COUNTY

Barnes, L. C.	Hamburg
Cockerham, H. E.	Portland
Cone, A. E.	Portland
Crandall, M. C.	Wilmot
Fletcher, J. W.	Montrose
Hawkins, M. C.	Parkdale
Holliday, B. F.	Parkdale
Norman, W. S.	Hamburg
Setzler, G. H.	Crossett
Simpson, J. W.	Hamburg
Spivey, C. E.	Crossett
Wood, J. T.	Crossett

BAXTER COUNTY

Appleby, Scott	Cotter
Baldwin, W. S.	Cotter
Morrow, J. J.	Cotter
Tipton, J. T.	Mountain Home
Tipton, W. C.	Laguna, N. M.
Weast, L. M.	Yellville

BENTON COUNTY

Atkinson, R. M.	Bentonville
Buffington, G. H.	Gravette
Clemmer, J. L.	Gentry
Cox, W. T.	Centerton
Crockett, C. S.	Lincoln
Curry, W. J.	Rogers
Duckworth, F. M.	Siloam Springs
Duncan, M. W.	Centerton
Eubanks, F. G.	Decatur
Glasscock, Sam S.	Norton, Kansas
Greene, L. O.	Pea Ridge
Gulledge, Jno. F.	Siloam Springs
Harrison, A. J.	Lowell
Highfill, E. J.	Cave Springs
Hodges, Guy	Rogers
Hodges, T. E.	Rogers
Horton, C. W.	Hiwassee
Hurley C. E.	Bentonville
Ireland, W. W.	Gentry
Koohs, H. J. G.	Rogers
Lindsey, J. H.	Bentonville
Love, Geo. M.	Rogers
McNeil, Clyde L.	Rogers
Montgomery, Chas. C.	Duenweg, Mo.
Moore, W. A.	Rogers
Mott, James M.	Lawrence, Kansas
Pickens, W. A.	Bentonville
Powell, J. T.	Gravette
Rice, C. A.	Rogers
Scott, L. L.	Siloam Springs
Smiley, J. L.	Siloam Springs
Thompson, J. S.	Gravette
Steele, R. W.	Siloam Springs
Wilson, C. S.	Gentry

BOONE COUNTY

Blackwood, J. C.	Harrison
Brand, W. M.	Lead Hill
Evans, D. E.	Harrison
*Floyd, G. W.	Western Grove
Fowler, J. H.	Harrison
Fowler, T. P.	Harrison
Gladden, J. G.	Western Grove
Jackson, G. I.	Harrison
Johnson, J. J.	Harrison
Kirby, F. B.	Harrison
McCurry, D. K.	Alpena Pass
Owens, D. L.	Harrison
Poynor, Wm. H.	Harrison
Routh, C. M.	Harrison
Sexton, J. W.	Mt. Judea
Sims, J. L.	Harrison

*Deceased.

BRADLEY COUNTY

Crow, M. T.	Warren
Pike, W. T.	Warren
Hartsell, W. L.	Warren
Johnson, R. L.	New Edinburg
Martin, C. N.	Warren
Martin, Rufus	Warren
Reasons, W. B.	Hermitage
Roark, W. N.	Hermitage
Sheriff, J. P.	Legels
Wilson, Geo. L.	Banks

CALHOUN COUNTY

Black, C. T.	Thornton
Jones, E. T.	Hampton
Rhine, T. E.	Thornton

CARROLL COUNTY

Bohannon, J. H.	Berryville
Butt, W. A.	Green Forest
Carter, A. L.	Berryville
Donaldson, C. W.	Green Forest
Huntington, R. H.	Eureka Springs
John, J. F.	Eureka Springs
Pace, Henry	Eureka Springs
Poynor, Erton E.	Stillwell, Okla.

CHICOT COUNTY

Baker, E.	Dermott
Barlow, E. E.	Dermott
Clark, B. C.	Lake Village
Douglas, S. W.	Eudora
Easterling, W. W.	Eudora
Henry, R. N.	Lake Village
McGehee, E. P.	Lake Village
Rigdon, F. E.	Readland
Thompson, J. A.	Dermott
Wilson, J. S.	Montrose

CLARK COUNTY

Bremer, J. P.	Point Cedar
Doane, S. N.	Arkadelphia
Kirkham, Z. L.	Okolona
Moore, J. S.	Arkadelphia
Moore, W. M.	Arkadelphia
Ross, H. A.	Arkadelphia
Rowland, W. T.	Arkadelphia
Townsend, Chas. K.	Arkadelphia
Townsend, N. R.	Arkadelphia

CLAY COUNTY

Cunning, I. H.	Knobel
Hiller, J. P.	Pollard
Jones, F. H.	Piggott
Latimer, N. J.	Corning
Lunt, J. P.	Rector
Lynch, Richard C.	Success
McGuire, J. E.	Piggott
Newkirk, C. H.	Corning
Poole, W. I.	St. Francis
Richardson, M. C.	Datto

CLEBURNE COUNTY

Hall, H. J.	Higden
-------------	--------

CLEVELAND COUNTY

Ellis, W. S.	New Edinburg
Hamilton, A. J.	Rison
Johnson, S. C.	Kingsland
McMurtrey, J. S.	Rison
Wilson, H. O.	Rison

COLUMBIA COUNTY

Baker, J. J.	Magnolia
Cooksey, W. P.	Magnolia
Horn, W. H.	Taylor
Hudnall, E. T.	Taylor
Hunt, Wm. J.	Magnolia
Jones, T. H.	Magnolia
Jordan, T. S.	Taylor
Kitchens, H. M.	Waldo
McLeod, G. F.	Magnolia
McWilliams, C. T.	Magnolia
Smith, P. M.	Magnolia
Sauter, Thos. E.	McNeil
Souter, A. J.	Waldo
*Stevens, C. D.	Magnolia
Walker, J. C.	Emerson

CONWAY COUNTY

Bradley, A. R.	Morrilton
Bruce, W. H.	Morrilton
Burgess, T. E.	Perry
Close, E.	Jerusalem
Fleming, J. T.	Perry
Goatcher, A. L.	Plumerville
Hardison, T. W.	Morrilton
Herring, R. G.	Martinville
Holbrook, Dan J.	Formosa
Holloway, W. R.	Center Ridge
Jackson, J. H.	Springfield
Jones, R. A.	Perry
Jones, Wm. Edgar	Morrilton
Logan, B. C.	Morrilton
McMahan, John Stephen	Clinton
Matthews, E. L.	Morrilton
Matthews, J. M.	Morrilton
Mobley, H. E.	Morrilton
Rieff, W. L.	Perryville
Stephens, A. H.	Casa

CRAIGHEAD COUNTY

Alcott, Geo. B.	Weiner
Altman, J. T.	Jonesboro
Baird, J. L.	Marked Tree
Barrett, R. M.	Black Oak
Bates, Chas. A.	Lake City
Boyd, D. L.	Lake City
Brown, C. W.	Weiner
Burns, R. B.	Jonesboro
Cothorn, Thad	Jonesboro
Ellis, Ira W.	Monette
Elders, J. W.	Harrisburg
Hafford, J. C.	Black Oak
Hale, Chas. S.	Cisco, Texas
Halton, W. C.	Jonesboro
Hindman, D. S.	Bay
Horn, L. D.	Egypt
Horner, E. J.	Jonesboro
Howell, J. C.	Nettleton
Jackson, W. W.	Jonesboro
Jernigan, Roscoe M.	Jonesboro
Lutterloh, Chas. H.	Jonesboro
Lutterloh, P. W.	Jonesboro
McAdams, H. H.	Jonesboro
McCracken, C. P.	Jonesboro
McCurry, John H.	Cash
McDaniel, E. C.	Tyroneza
McDaniel, L. H.	Tyroneza
McGinnis, Thos. J.	Fisher
Moreland, S. W.	Jonesboro
Moreland, W. H.	Tyroneza
Nisbett, Frank	Brookland
Overstreet, W. C.	Jonesboro
Ramsey, J. W.	Jonesboro
Ratliff, R. W.	Jonesboro
Roberts, Fred	Lake City
Scott, A. G.	Jonesboro
Smith, J. M.	Smackover
Smith O. V.	Bay
Smith, W. H.	Bono
Stroud, H. A.	Jonesboro
Thorn, W. T.	Monette
Tullos, A. M.	Trumann
Verser, W. W.	Harrisburg
Waddell, Gracey A.	Bertrand, Mo.
Walker, B. F.	Jonesboro
Willett, R. H.	Jonesboro

CRAWFORD COUNTY

Bennett, B. L.	R. F. D. Van Buren
Blakemore, J. E.	Van Buren
Bourland, O. M.	Van Buren
Crigler, J. R.	Alma
Dibrell, M. S.	Van Buren
Galloway, Q. R.	Van Buren
Grant, S. C.	Mulberry
Hardin, Nina V.	Fayetteville
Kirkland, Saml. D.	Van Buren
T. M. Mitchell	Mountainburg
Reves, Wm. R.	Alma
Savery, H. W.	Van Buren
Stewart, Jno. M.	Van Buren
Trice, J. B.	Van Buren
Wigley, J. A.	Mulberry

CRITTENDEN COUNTY

Hare, T. S.	Crawfordsville
McVay, L. C.	Marion
Parker, A. C.	Clarksdale
Stevenson, B. M.	Memphis, Tenn
Watson, H. S.	Earl

CROSS COUNTY

Barner, W. B.	Wynne
Griffin, W. L.	Cherry Valley
Hare, Jacob L.	Wynne
Lipse, L. H.	Wynne
Longest, Ruffin	Wynne
McKie, J. D.	Wynne
McKie, W. H.	Wynne
Miller, J. S.	Parkin
Stewart, Thos. J.	Wynne
Wilson, Thos.	Wynne

DALLAS COUNTY

Atkinson, H. H.	Fordyce
Cheatham, H. A.	Princeton
Harrison, F. E.	Fordyce
Hope, O. W.	Carthage
Stewart, A. M.	Manning
Taylor, J. E. M.	Sparkman
Thornton, J. D.	Willow
Wilson, J. F.	Dalark

DESHA COUNTY

Applewhite, R. E.	Watson
Biscoe, Gibbs	Dumas
Chenault, J. C.	McGehee
DeClark, W. H.	McGehee
Francis, J. W.	McGehee
Grayson, W. B.	McGehee
Isom, A.	Dumas
Kimbro, C. H.	Tillar
MacCammon, Vernon	Arkansas City
*Price, C. C.	Dumas
Smith, H. T.	McGehee
Watts, J. D.	Dumas
White, R. F.	McGehee

DREW COUNTY

Collins, A. S. J.	Monticello
Cotham, E. R.	Monticello
Duckworth, F. L.	Monticello
Gates, S. M.	Monticello
Kimbro, S. O.	Monticello
Lisenbee, A. M.	Sparkman
Pope, M. Y.	Monticello
Smith, R. N.	Collins

FAULKNER COUNTY

Brown, Geo. S.	Conway
Burnett, M. C.	Wooster
Cureton, H. E.	Conway
Dawson, R. L.	Wooster
DeJarnett, J. W.	Conway
Dickerson, C. H.	Conway
Downs, J. H.	Vilonia
Fraser, N. E.	Conway
Harrod, George	Conway
Henderson, G. L.	Conway
Huddleston, G. D.	Conway
Ingram, E. M.	Enola
Lieblong, J. S.	Greenbrier
Mabry, Thos.	Holland
McCollum, I. N.	Conway
McDonald, W. T.	Vilonia
McMahan, J. E.	Conway
Munn, J. B.	Vilonia
Muse, J. M.	Conway
Smith, Marcus T.	Conway
Watson, T. C.	Mount Vernon
West, W. J.	El Paso
Westerfie'd, J. S.	Conway

FRANKLIN COUNTY

Blackburn, E. W.	Ozark
Bollinger, W. H.	Charleston
Douglass, Thos.	Ozark
Gibbons, W. H.	Ozark
Hansberry, A. J.	Ozark
*Hodges, E. F.	Branch
Mooney, J. D.	Altus
Porter, W. C.	Ozark
Post, J. L.	Altus
Williams, H. F.	Stonewall, Okla.

GARLAND COUNTY

Black, T. N.	Hot Springs
Biggs, Orvis	Hot Springs
Brewer, H. W.	Hot Springs
Browne, P. Z.	Hot Springs
Browning, E. R.	Hot Springs
Broyles, S. K.	Hot Springs
Bruce, G. C.	Amarillo, Texas
Casada, B. F.	Hot Springs
Chamberlain, Warren	Hot Springs
Chesnut, Jas. H.	Hot Springs
Clardy, Floyd	Hot Springs
Coffey, G. C.	Hot Springs

GARLAND COUNTY—Continued

Collings, H. P.	Hot Springs
Connell, W. H.	Hot Springs
Dake, Chas.	Hot Springs
Deaderick, W. H.	Hot Springs
Diederich, V. P.	Hot Springs
Drennen, D. Edward	Hot Springs
Drennen, C. Travis	Hot Springs
Eckel, G. M.	Hot Springs
Ellis, L. R.	Hot Springs
Ellsworth, E. H.	Hot Springs
Fletcher, Geo. B.	Hot Springs
Freeman, T. N.	Hot Springs
Garratt, C. E.	Hot Springs
Greene, J. L.	Hot Springs
Hebert, Gaston	Hot Springs
Holt, Wm. L.	Hot Springs
Jarrell, Foster	Hot Springs
King, Ossian H.	Hot Springs
Klugh, Walter G.	Hot Springs
Knoefel, W. R.	Hot Springs
Lautman, M. F.	Hot Springs
Laws, W. V.	Hot Springs
Lee, D. C.	Hot Springs
McKenzie, E. M.	Hot Springs
Martin, L. G.	Hot Springs
Mee, Edmund L.	Hot Springs
Merritt, J. F.	Hot Springs
Minor, J. C.	Hot Springs
Mobbs, Bert	Honolulu, Hawaii
Moss, Chas. S.	Hot Springs
Nims, C. H.	Hot Springs
Parks, Wm. P.	Hot Springs
Pate, C. N.	Hot Springs
Porter, Wm. F.	Hot Springs
Proctor, J. M.	Hot Springs
Robertson, J. A.	Hot Springs
Rowland, J. F.	Hot Springs
Sanders, T. E.	Hot Springs
Scully, F. J.	Hot Springs
Sharpe, S. B.	Hot Springs
Shaw, J. B.	Hot Springs
Short, Z. N.	Hot Springs
Simpson, W. F.	Hot Springs
Smith, John Henry	Little Rock
Smith, Oliver A.	Hot Springs
Smith, W. K.	Hot Springs
Snider, W. L.	Hot Springs
Steele, S. B.	Hot Springs
Stell, J. S.	Hot Springs
Stough, D. B.	Hot Springs
Strachan, J. B.	Hot Springs
Sullivan, A. G.	Hot Springs
Tarkington, Grayson E.	Hot Springs
Tarleton, F. S.	Hot Springs
Thompson, Loyd	Hot Springs
Tribble, A. H.	Hot Springs
Vaughan, P. T.	Hot Springs
Wade, H. K.	Hot Springs
Waldrop, J. G.	Hot Springs
Weil, S. D.	Hot Springs
Wenger, O. C.	Hot Springs
Wilkins, J. S.	Hot Springs
Wootton, W. T.	Hot Springs
Wright, Homer K.	Hot Springs

GRANT COUNTY

Butler, J. L.	Sheridan
Cole, C. F.	Prattsville
Kelly, O. R.	Sheridan
Paxton, Robert L.	Thiel
Sheppard, Irvin	Sheridan
Whitehead, S. H.	Sheridan

GREENE COUNTY

Baker, E. S.	Alexandria, La.
Blackwood, W. J.	Walcott
Bridges, G. P.	Paragould
Clopton, O. H.	Marmaduke
Dillman, James A.	Paragould
Ellington, Walter E.	R. 6, Paragould
Ellis, B. E.	Greenway
Haley, R. J.	Paragould
Hardesty, C. A.	Paragould
Hudgins, J. J.	Marmaduke
Lamb, Jones H.	Paragould
Majors, W. M.	Paragould
Scott, F. M.	Paragould

HEMPSTEAD COUNTY

Allison, Walter G.	Hope
Cannon, G. E.	Hope
Carrigan, P. B.	Hope
Garner, W. M.	Hope
Gentry, J. E.	McCaskill
*Harris, R. L.	Hope
Lile, L. M.	Hope
Luck, J. L.	Hope
McDonald, Thos. Lee	Hope
Martindale, Geo. H.	Hope

HEMPSTEAD COUNTY—Continued

Robins, Rual, R.	Hope
Robins, Wm. F.	Ozan
Saner, W. F.	Hope
Smith, Don	Hope
Weaver, J. H.	Hope

HOT SPRING COUNTY

Barrier, W. F.	Malvern
Bramlitt, E. T.	Malvern
Carson, D. J.	Little Rock
Henry, C. A.	Thiel
Hodges, W. G.	Malvern
McCray, E. H.	Malvern
Norton, J. M.	Donaldson
Pharr, J. W.	Malvern
Prickett, Chas.	Malvern
Williams, J. M.	Malvern

HOWARD-PIKE COUNTY

Alford, T. F.	Murfreesboro
Gibson, W. M.	Nashville
Hutchinson, D. A.	Nashville
Toland, W. H.	Nashville

INDEPENDENCE COUNTY

Bone, O. L.	Newark
Burge, H. G.	Nettleton
Craig, M. S.	Batesville
Dorr, R. C.	Batesville
Evans, L. T.	Batesville
Gray, C. C.	Batesville
Gray, E. M.	Evening Shade
Gray, F. A.	Batesville
Hooper, J. M.	Batesville
Huskey, J. M.	Moorefield
Jeffrey, Paul H.	Bethesda
Johnston, O. J. T.	Batesville
Kennerly, J. H.	Batesville
*Lawrence, W. B.	Batesville
McAdams, V. D.	Cord
Pascoe, V. L.	Newark
Rice, W. M.	Cord
Robertson, S. N.	Sulphur Rock
Rodman, T. N.	Batesville
Smith, H. H.	Calico Rock
Woods, O. S.	Salem
Woods, T. J.	Evening Shade
Wyatt, W. A.	Rosie

JACKSON COUNTY

Best, A. L.	Newport
Causey, G. A.	Swifton
Elton, A. M.	Newport
Erwin, Ira H.	Newport
Gray, C. R.	Newport
Harris, M. L.	Newport
Ivy, Jno. B.	Tuckerman
Jamison, O. A.	Tuckerman
Kimberlin, K. K.	Tuckerman
Moore, W. P.	Newport
Owens, M. B.	Amagon
Pierce, W. N.	Tupelo
Stallings, Walker E.	Newport
Stephens, G. K.	Newport
Watson, E. L.	Newport
Wilson, W. F.	R. F. D., Bradford

JEFFERSON COUNTY

Blankenship, W. H.	Pine Bluff
Beard, J. C.	Pine Bluff
Capel, C. B.	Pine Bluff
Caruthers, C. K.	Pine Bluff
Chavis, W. M.	Pine Bluff
Clark, Oliver Wm.	Pine Bluff
Crump, J. F.	Pine Bluff
Cunningham, T. J.	Pine Bluff
Gill, J. F.	Pine Bluff
Glover, C. A.	Pine Bluff
Gurney, J. O.	Pine Bluff
Hankinson, O. C.	Pine Bluff
Higinbotham, C. J.	Pine Bluff
Hughes, A. A.	Pine Bluff
Jenkins, J. S.	Pine Bluff
John, J. W.	Pine Bluff
Lemons, J. M.	Pine Bluff
Lowe, W. T.	Pine Bluff
Luck, B. D.	Pine Bluff
McMullen, E. C.	Pine Bluff
Palmer, J. T.	Pine Bluff
Pittman, W. G.	Pine Bluff
Power, Paul H.	Pine Bluff
Pyatt, E. C.	Pine Bluff
Savin, T. L.	Pine Bluff
Shelton, M. A.	Wabbaseka
Simmons, Walter H.	Pine Bluff
Smith, F. M.	Vicksburg, Miss.
Smith, S. E.	Pine Bluff
Spillyards, J. S.	Pine Bluff

JEFFERSON COUNTY—Continued

Tankersley, Grace	Pine Bluff *
Troupe, A. W.	Pine Bluff
Vance, J. O.	New Gascony
Vines, C. L.	Pine Bluff
*Williams, Harry E., Sr.	Pine Bluff
Williams, Harry E. Jr.	Pine Bluff
Woodul, T. W.	Pine Bluff

JOHNSON COUNTY

Barger, M. I.	Lamar
Boen, A. L.	Clarksville
Boyer, H. L.	Hartman
*Bradley, John F.	Lamar
Burgess, M. E.	Pine Ridge, S. D.
Graves, S. M.	Hagarville
*Gray, L. C.	Clarksville
Hardgrave, G. L.	Clarksville
Horner, W. M.	Coal Hill
Hunt, E. C.	Harmony
Hunt, E. H.	Clarksville
Hunt, Wm. R.	Clarksville
King, R. E.	Harmony
Kolb, J. S.	Clarksville
Love, J. G.	Hartman
Manley, R. N.	Clarksville
Siegel, G. R.	Clarksville

LAFAYETTE COUNTY

Armstrong, R. L.	Lewisville
Baker, F. E.	Stamps
Jack, J. J.	Stamps
Keith, A. W.	Stamps
McKnight, J. F.	Bradley
Nichols, D. C.	Stamps
Terrell, E. P.	Shawnee, Okla.
Youmans, F. W.	Lewisville

LAWRENCE COUNTY

Allen, Marshall	Walnut Ridge
Ball, C. C.	Ravenden
Guthrie, R. H.	Massillon, Ohio
Guthrie, T. C.	Smithville
Hatcher, Wright W.	Imboden
Henderson, A. G.	Imboden
Hughes, J. C.	Hoxie
Johnston, Wm.	Hardy
Land, J. C.	Walnut Ridge
McCarroll, H. R.	Walnut Ridge
Neece, T. C.	Walnut Ridge
Robinson, W. J.	Portia
Rudy, D. B.	Imboden

LAWRENCE COUNTY—Continued

Townsend, C. C.	Walnut Ridge
Warren, G. A.	Black Rock
Watkins, Geo. Max	Walnut Ridge

LEE COUNTY

Bean, W. B.	Marianna
Beatty, W. S.	R. 1, Aubrey
Bogart, H. D.	Marianna
Crawford, W. S.	Marianna
Chaffin, C. W.	Moro
Ferrell, S. A.	Brickeys
Lewis, John F.	R. 1, Marianna
McLendon, Mac	Marianna
Russwurm, S. C.	Hughes
Wall, E. D.	Marianna
White, H. L.	Rondo
Williamson, O. L.	Marianna
Wilsford, A. L.	Moro

LINCOLN COUNTY

Colquitt, S. W.	Pine Bluff
Corney, R. B.	Little Rock
Dixon, Chas. W.	Gould
*Hardin, Robt.	Cummins
McClendon, J. M.	Gould
Ringgold, G. W.	Gould
Thiolliere, A. C.	Gould
Wood, G. C.	Grady

LITTLE RIVER COUNTY

Castile, Herman	Foreman
King, Edward R.	Foreman
Nixon, A. M.	Arden
Phillips, Paul H.	Ashdown
Ringgold, J. W.	Ashdown
Vaughan, W. E.	Richmond
York, W. W.	Ashdown

*Deceased.

LOGAN COUNTY

Baker, F. P.	Booneville
Harkins, R. A.	Ratcliff
McConnell, S. P.	Booneville
Smith, A. M.	Paris
Smith, Jno. F.	Paris
Smith, J. J.	Paris
Stewart, John	Booneville

LONOKE COUNTY

Beatty, S. S.	England
Benton, T. E.	Lonoke
Bowers, A. L.	Scott
Brewer, John F.	Kerr
Butler, O. C.	Seminole, Okla.
Callahan, E. A.	Carlisle
Corn, F. A.	Lonoke
Crowgey, W. B.	Scott
Cunning, John R.	Lonoke
Cunning, John E.	Ripley, Tenn.
*Granberry, G. W.	Little Rock
Harris, Ernest H.	Coy
Kelly, M. D.	Lonoke
Newsom, W. H.	Louann
*Rice, Roy	North Little Rock
Scruggs, G. W.	Humnoke
Smith, Harry B.	Keo
Street, H. N.	Lonoke
Thibault, Henry	Scott
Ward, O. D.	England
Watson, Asa C.	Seminole, Okla.
Wells, John B.	Scott

MADISON COUNTY

Acree, W. E.	Huntsville
Youngblood, Fred	Huntsville

MILLER COUNTY

Beck, E. L.	Texarkana
Chace, A. E.	Texarkana
Collom, S. A.	Texarkana
Cook, J. C.	Garland City
*Dale, J. R.	Texarkana
Dale, R. R.	Texarkana
Fuller, T. E.	Texarkana
Gardner, W. P.	Texarkana
*Grant, R. L.	Texarkana
Heller, A. G.	Texarkana
Hibbetts, Wm.	Texarkana
Howze, H. H.	Texarkana
Hunt, Preston	Texarkana
Kelly, K. M.	Texarkana
Kittrell, T. F.	Texarkana
Kosminsky, L. J.	Texarkana
Lanier, L. H.	Texarkana
Laws, C. S.	Texarkana
Lee, A. G.	Texarkana
Lennard, F. M.	Texarkana
Longino, H. E.	Texarkana
Mann, R. H. T.	Texarkana
Middleton, B. C.	Texarkana
Murry, H. E.	Texarkana
Portwood, O. F.	Texarkana
Robison, Jas. Travis	Texarkana
Smiley, H. H.	Texarkana
Smith, C. A.	Texarkana
Smith, J. K.	Texarkana
Smith, Wm. Decker	Texarkana
Watts, E. M.	Texarkana
Webster, H. R.	Texarkana
York, M. N.	Texarkana

MISSISSIPPI COUNTY

Barksdale, Oscar	Wilson
Caldwell, C. A.	Blytheville
Campbell, J. H.	Joiner
Crawford, H. F.	Memphis, Tenn.
Ellis, N. B.	Wilson
Grimmett, W. A.	Blytheville
Harwell, C. M.	Osceola
Hill, E. V.	Blytheville
Hosey, N. R.	Joiner
Hudson, T. F.	Luxora
Husbands, F. L.	Blytheville
Johnson, I. R.	Blytheville
Johnson, R. L.	Bassett
Lockett, J. A.	Dell
McCall, W. S.	Blytheville
*McRae, Wm.	Blytheville
Martin, S. P.	Blytheville
Massey, L. D.	Osceola
*Nall, R. P.	Armored
Owen, Wm. M.	Armored
Saliba, J. A.	Blytheville
Sheddan, W. J.	Osceola
Sims, H. C.	Burdette
Smith, F. D.	Blytheville
Stevens, C. C.	Blytheville
Tidwell, J. L.	Dell
Turner, Wiley E.	Waverly, Tenn.
Usrey, Max O.	Blytheville
Waldrop, H. G.	Keiser
Wilson, C. E.	Blytheville

MONROE COUNTY

Boswell, W. L.	Clarendon
Bradford, T. B.	Toone, Tenn.
Darnall, Ernest	Holly Grove
Gilbrech, Arthur H.	Clarendon
Houston, Matt. F.	Clarendon
McKnight, C. H.	Brinkley
McKnight, E. D.	Brinkley
Miller, J. C.	Lepanto
Murphy, F. T.	Brinkley
Murphy, N. E.	Clarendon
*Phipps, J. H.	Clarendon
Stout, L. H.	Brinkley
Terry, P. E.	Holly Grove
Thomas, P. E., Sr.	Clarendon

MONTGOMERY COUNTY

Freeman, W. D.	Mount Ida
McFadden, J. C.	Mount Ida
McLean, J. H.	Caddo Gap
McLean, J. W.	Caddo Gap
Robbins, J. D.	Oden
Stueart, J. B.	Norman

NEVADA COUNTY

Buchanan, A. S.	Prescott
Buchanan, G. A.	Prescott
Chastain, J. S.	Prescott
Hesterly, J. B.	Prescott
Hesterly, S. J.	Prescott
Hirst, O. G.	Prescott
McDaniel, Thos. W.	Boughton
Mendenhall, T. J.	Rosston
Nelms, C. F.	Laneburg
Pool, W. B. H.	Bodcaw
Reeder, A. A.	Emmet.
Rice, W. W.	Prescott
Whaley, E. S.	Reeder

OUACHITA COUNTY

Early, C. S.	Camden
Henry, H. H.	Camden
Jameson, J. B.	Camden
McGill, S. D.	Camden
McRea, W. T.	Pan Handle, Texas
Powell, B. V.	Camden
Purifoy, W. A.	Chidester
Rinehart, J. S.	Camden
Robins, R. B.	Camden
Rushing, J. L.	Chidester
Sanders, Geo. P.	Stephens
Thompson, H. F.	Bearden
Thompson, J. S.	Stephens
Thompson, S. A.	Stephens
Williams, C. A.	Camden
Word, N. S.	Camden

PHILLIPS COUNTY

Altman, G. G.	Helena
Baker, J. P.	West Helena
Bean, J. W.	Marvell
Bradley, W. T.	West Helena
Brown, E. T.	Lexa
Bruce, W. B.	Marvell
Butts, J. W.	Helena
Cox, Allen E.	Helena
Cox, Aris W.	Helena
Ellis, J. B.	Helena
Eubanks, G. W.	Wabash
Fink, M.	Helena
Henry, Morris	Helena
King, J. A.	Mellwood
King, W. C.	Helena
Kultgen, Edward	Elaine
Miller, C. S.	Helena
Nichols, J. W.	Helena
Norton, Earl F.	Marvell
Orr, W. R.	Helena
Rightor, H. H.	Helena
Russwurm, W. C.	Helena
Storm, Geo. R.	West Helena

POLK COUNTY

Campbell, Cyrus A.	Cove
Dunman, B. E.	Mena
Fletcher, T. M.	Mena
Hawkins, B. H.	Mena
Hilton, J. G.	Mena
Johnson, C. F.	Hatfield
Lee, F. A.	Vandervoort
Mullins, F. C.	Hatfield
Vandiver, W. C.	Mena
Watkins, P. R.	Mena

POPE COUNTY

Berryman, L. D.	Russellville
Brooke, Hugh C.	Dardanelle
Campbell, J. M.	Russellville
Drummond, H. S.	Russellville
Haney, A. C.	Russellville
Jean, R. M.	Pottsville
Linton, A. C.	Hector
Mason, E. C.	Russellville
Mason, W. L.	Atkins
Miller, J. W.	Gum Log
Montgomery, W. A.	Atkins
Scarlett, Wm. P.	Russellville
Smith, R. L.	Russellville
Stanford, J. M.	Russellville
Tate, A. B.	Atkins
Truett, Edward D.	Dover
Webb, G. C.	Russellville
Wright, Jerome	Russellville
Yates, G. W.	Scottsville

PRAIRIE COUNTY

Adams, Edward	DeValls Bluff
Crockett, W. H.	Biscoe
Crow, L. M.	Des Arc
Ellis, C. S.	Lonoke
Gilliam, J. C.	Des Arc
Hipolite, F. A.	DeValls Bluff
Kitley, J. R.	Mayflower
Lynn, J. R.	Hazen
Parker, Jas.	DeValls Bluff
Parker, Luke	DeValls Bluff
Porter, T. G.	Hazen

PULASKI COUNTY

Allen, F. E.	Little Rock
Allen, Hoyt R.	Little Rock
Arkebauer, C. A.	Little Rock
Bailey, W. E.	Little Rock
Barlow, M. J.	North Little Rock
Barrier, L. F.	Little Rock
Barrett, Jos. E.	Little Rock
Bathurst, Wm. R.	Little Rock
Bennett, B. A.	Little Rock
Blakely, R. M.	Little Rock
Bradley, F. S.	Dobbs Ferry, N. Y.
Bond, S. P.	Little Rock
Brooks, C. M.	Little Rock
Browning, H. W.	Little Rock
Burns, W. M.	North Little Rock
Calcote, R. J.	Little Rock
Caldwell, Robert	Little Rock
Carruth, O. A.	Little Rock
Carruthers, F. W.	Little Rock
Cheairs, D. T.	Little Rock
Chesnutt, C. R.	Little Rock
Coon, A. B.	Little Rock
Cooper, F. M.	Little Rock
Cosgrove, K. W.	Little Rock
Crawford, J. B.	Little Rock
Crawford, S. R.	Little Rock
Cull, S. T. W.	Little Rock
Cunningham, J. C.	Little Rock
Daly, M. G.	Little Rock
Darnall, R. F.	Little Rock
Davis, E. N.	Little Rock
Davis, J. C.	Little Rock
Day, E. O.	Little Rock
Delaney, J. P.	Little Rock
Dibrell, Jno. R.	Little Rock
Dibrell, Jas. L.	Little Rock
Dickinson, M. F.	Little Rock
Dishongh, H. A.	Little Rock
Dooley, J. B.	Compton, Calif.
Dunaway, W. C.	Little Rock
Eubanks, R. M.	Little Rock
Fly, T. M.	Little Rock
Freedman, Theo.	Little Rock
Freemyer, W. N.	Little Rock
*French, F. L.	Little Rock
Fulmer, S. C.	Little Rock
Fulmer, P. M.	Little Rock
Gann, Dewell, Jr.	Little Rock
Garrett, F. H.	Little Rock
Garrison, C. W.	Little Rock
Gray, A. F.	Little Rock
Gray, Oscar	Little Rock
Gray, W. E.	Little Rock
Higgins, Homer A.	Little Rock
Hinkle, S. B.	Little Rock
Hoge, S. F.	Little Rock
Holmes, G. M.	Little Rock
Howell, A. R.	North Little Rock
Howell, Stacy C.	Little Rock
Hudson, E. M.	Little Rock
Humphreys, Lincoln	Paris Island, S. C.
Hurrie, F. E.	Little Rock
Hyatt, D. T.	Little Rock
Jackson, Geo. F.	Little Rock
Jewell, I. H.	Paris
Jobe, A. L.	Little Rock
Johnston, E. E.	Little Rock
Jones, H. F. H.	Little Rock

PULASKI COUNTY—Continued

Jones, I. J.	Little Rock
Jones, J. E.	Little Rock
Jones, O. O.	Little Rock
Jones, W. E.	Little Rock
Judd, O. K.	Little Rock
Junkin, S. P.	R. 4, Little Rock
Kennedy, Jas. Wm.	Philadelphia, Pa.
Kinsworthy, J. H.	Little Rock
Kirby, A. C.	Little Rock
Kirk, C. C.	Little Rock
Kory, R. C.	Little Rock
Kriesel, W. A.	Little Rock
Lamb, W. A.	Little Rock
Law, Ralph A.	Little Rock
Lenow, Jas. H.	Little Rock
Lewis, Geo. V.	Little Rock
Linzy, J. R.	North Little Rock
McAdoo, H. W.	North Little Rock
McCaskill, M. E.	Little Rock
McCormack, G. A.	Little Rock
McNeil, M. P.	Owyhee, Nev.
McKinney, A. T.	Little Rock
McRae, W. M.	Little Rock
Mahoney, P. L.	Little Rock
March, C. J.	Fordyce
Matthews, W. M.	Little Rock
May, C. B.	Little Rock
May, W. S.	Little Rock
Meek, Edward	Little Rock
Melson, O. C.	Little Rock
Miller, W. H.	Little Rock
Moon, Chas. R.	Little Rock
Moore, G. C.	Little Rock
Moore, R. B.	Little Rock
Murphey, Pat	Little Rock
Oates, Charles E.	Little Rock
O'Connor, F. J.	Little Rock
Ogden, M. D.	Little Rock
Parmley, L. V.	Jerome
Patterson, R. Q.	Little Rock
Pemberton, E. M.	Little Rock
Pettus, C. S.	Little Rock
Ponder, E. T.	Little Rock
Pryor, R. E.	Little Rock
Reagan, G. W.	Little Rock
Reagan, L. D.	Little Rock
Reed, C. C.	Little Rock
Rhinehart, B. A.	Little Rock
Rhinehart, D. A.	Little Rock
Richardson, W. R.	Little Rock
Riegler, N. W.	Little Rock
Robinson, F. C.	Little Rock
Rose, W. D.	Little Rock
Runyan, J. P.	Little Rock
Sadler, W. L.	Little Rock
Sanderlin, J. H.	Little Rock
Saxon, R. L.	Little Rock
Scarborough, J. I.	Little Rock
Scott, C. V.	Little Rock
Scott, Homer	Little Rock
Sheppard, J. P.	Little Rock
Shipp, A. C.	Little Rock
Shuffield, Jos.	Little Rock
Smith, Morgan	Little Rock
Smith, W. F.	Little Rock
Snodgrass, W. A.	Little Rock
Spitzberg, Irving J.	Little Rock
Stover, A. R.	Little Rock
Strauss, A. W.	Little Rock
Summers, J. A.	North Little Rock
Switzer, D. M.	North Little Rock
Thomas, P. E., Jr.	Little Rock
Thompson, G. D.	Little Rock
Vaughan, Milton	Little Rock
Villars, H. F.	North Little Rock
Vinsonhaler, Frank	Little Rock
Walt, D. C.	Little Rock
Wassell, C. McA.	Little Rock
Watkins, Anderson	Little Rock
Watkins, John G.	Little Rock
Wayman, A. K.	Little Rock
Wayne, J. T.	Little Rock
Webb, V. R.	Little Rock
Wemy, N. F.	Little Rock
White, E. H.	Little Rock
White, L. W.	Little Rock
Wilkes, E. H.	Little Rock
Williamson, C. S.	Little Rock
Wilson, Paul W.	Huttig
Witt, Ben M.	Little Rock
Witt, C. E.	Little Rock
Zell, A. M.	Little Rock

RANDOLPH COUNTY

Brown, J. W.	Pocahontas
Hamil, W. E.	Pocahontas
Hull, Henry B.	Mammoth Spring
Johnson, R. R.	Rt. 1, Walnut Ridge
Johnson, T. Z.	Pocahontas
Loftis, Jno. R.	Maynard
Pace, L. R.	Pocahontas
Ryburn, James W.	Manson
*Throgmorton, H. L.	Pocahontas

SALINE COUNTY

*Blakely, M. M.	Benton
Buckley, E. A.	Bauxite
Buffington, T. E.	Benton
Burks, J. A.	Traskwood
Davis, W. S.	Owensville
Gann, Dewell, Sr.	Benton
*Phillips, J. M.	Benton
Steed, C. J.	Gurdon
Walton, Chas. R.	Augusta, Ga.
Walton, J. W.	Benton
Ward, W. W.	Alexander
Wright, J. D.	Mabelvale

SCOTT COUNTY

Bevill, C.	Waldron
Duncan, B. W.	Parks
Duncan, F. R.	Waldron
Duncan, L. D.	Waldron
Jones, Paul	Mound Valley, Ks.
Sorrell, L. B.	Waldron

SEARCY COUNTY

*Baker, A. S.	Snowball
Cotton, J. O.	Leslie
Daniel, Sam G.	Marshall
Dickens, G. W.	Leslie
Fendley, E. G.	Leslie
Heard, W. W.	Watts
Henley, J. A.	Marshall
Melton, A. S.	Marshall
Moore, W. T.	Everton
Roberts, E. E.	Gilbert
Rogers, Wm. F.	St. Joe
Wood, E. W.	Marshall

SEBASTIAN COUNTY

Benefield, C. E.	Fort Smith
Benefield, J. H.	Fort Smith
Bevill, S. D.	Fort Smith
Billingsley, C. B.	Fort Smith
Blair, A. A.	Fort Smith
Brooksher, W. R., Jr.	Fort Smith
Buckley, J. H.	Fort Smith
Bungart, C. S.	Fort Smith
Carney, Andre B.	Fort Smith
Chapman, A. S.	Fort Smith
Coffman, J. S.	Lavaca
Cooper, St. Cloud	Fort Smith
Dorente, D. R.	Fort Smith
Dorsey, H. C.	Fort Smith
Eberle, Walter G.	Fort Smith
Foltz, Jas. A.	Fort Smith
Foster, M. E.	Fort Smith
Freer, B. W.	Fort Smith
Gardner, Lycurgus	Fort Smith
Goldstein, D. W.	Fort Smith
Hall, Chas. W.	Greenwood
Harvey, John H.	Fort Smith
Hoge, A. F.	Fort Smith
Holt, C. S.	Fort Smith
Hynes, Geo. F.	Fort Smith
Jeffery, T. E.	Fort Smith
Johnson, Hugh	Fort Smith
Jones, E. B.	Hartford
Jones, I. Fulton	Fort Smith
Kennedy, C. H.	Fort Smith
King, H. C.	Fort Smith
Little, J. E.	Fort Smith
McCormack, N. D.	Fort Smith
Means, C. S.	Fort Smith
Moulton, E. C.	Fort Smith
Moulton, H.	Fort Smith
Riddler, P. A.	Fort Smith
Smith, H. H.	Fort Smith
Southard, J. D.	Fort Smith
Southard, J. S.	Fort Smith
Stubbs, S. P.	Fort Smith
Taylor, J. M.	Fort Smith
Thompson, H. B.	Fort Smith
Ware, Bertram L.	Greenwood
Wilson, Cons P.	Fort Smith
Wolferrmann, S. J.	Fort Smith
Woods, G. G.	Huntington
Wyatt, R. B.	Fort Smith

SEVIER COUNTY

Anderson, J. B.	Ben Lomond
Archer, C. A.	DeQueen
Clingan, A. J.	DeQueen
Dickinson, R. C.	DeQueen
Graves, J. C.	Lockesburg
Hendricks, J. S.	Wewoka, Okla.
Hendrix, B. E.	Gillham
Hopkins, R. L.	DeQueen
Kennedy, J. R.	DeQueen
Kitchens, C. E.	DeQueen
Norwood, M. L.	Lockesburg

ST. FRANCIS COUNTY

Bogart, J. A.	Forrest City
Boggan, P. P.	Forrest City
Brown, J. T.	Forrest City
Caldwell, A. B.	Caldwell
Chaffin, E. J.	Hughes
McCown, N. C.	Forrest City
McDougal, J. F.	Forrest City
Powell, Clyde V.	Round Pond
Proctor, F. L.	Forrest City
Rush, J. O.	Forrest City

UNION COUNTY

Bush, T. J.	El Dorado
Carrington, H. K.	El Dorado
Cathey, A. D.	El Dorado
Center, W. B.	Norphlet
Cullins, Jno. G.	New York, N. Y.
DeBolt, G. C.	El Dorado
Elkins, W. N.	Junction City
Engle, C. G.	El Dorado
Falvey, J. C.	El Dorado
Ferguson, J. V.	El Dorado
Fincher, L. G.	Wesson
Guthrey, J. E.	El Dorado
Hancock, W. G.	Cotton Plant
Harper, Wm. L.	Junction City
Irby, Frank L.	Wesson
McGraw, S. J.	El Dorado
McKinney, A. B.	Tivoli, Texas
Mahony, F. O.	El Dorado
Mayfield, A. M.	El Dorado
Mitchell, J. G.	El Dorado
Moore, J. A.	El Dorado
Morgan, T. M.	El Dorado
Munn, E. J.	El Dorado
Murphy, Geo. D.	El Dorado
Murphy, G. W. T.	Strong
Niehuss, H. H.	El Dorado
Nolan, J. W.	El Dorado
Purifoy, L. L.	El Dorado
Richardson, Chas. T.	Seminole, Okla.

*Deceased.

UNION COUNTY—Continued

Russell, M. V.	El Dorado
Sheppard, J. K.	El Dorado
Sheppard, J. M.	El Dorado
Slaughter, J. Henry	Norphlet
Slaughter, J. W.	El Dorado
Tanner, J. F.	El Dorado
Thrower, W. W.	El Dorado
Vines, F. P.	El Dorado
Wharton, J. B.	El Dorado
White, D. E.	El Dorado
Wozencraft, W. L.	El Dorado

WASHINGTON COUNTY

Bean, J. L.	Fayetteville
Callen, C. B.	Fayetteville
Callen, L. H.	Fayetteville
Cannon, J. S.	West Fork
Cooper, T. L.	Elm Springs
Curry, Wm.	Cane Hill
Ellis, E. F.	Fayetteville
Gilbert, A. A.	Fayetteville
Gregg, A. S.	Fayetteville
Harr, H. T.	Fayetteville
Hathcock, P. L.	Fayetteville
Henry, R. T.	Springdale
McCormick, E. G.	Prairie Grove
Martin, J. E.	Springdale
*Miller, Otey	Fayetteville
Mock, W. H.	Prairie Grove
Moore, A. I.	Fayetteville
Morrow, F. R.	Fayetteville
Paddock, C. B.	Fayetteville
Roberts, D. C.	Fayetteville
Sisco, C. P.	Springdale
Swift, Chas. E.	Elkins
Walker, J. W.	Fayetteville
Wallace, Jno. M.	Fayetteville
Wood, H. D.	Fayetteville

WHITE COUNTY

Abington, E. H.	Beebe
Abington, W. H.	Beebe
Allbright, S. J.	Searcy

WHITE COUNTY—Continued

Brewer, T. E.	Beebe
Burge, T. G.	Judsonia
Clark, W. A.	Bald Knob
Evans, A. A.	Bald Knob
Felts, W. R.	Judsonia
Hardy, F. P.	Center Hill
Harrison, A. G.	Searcy
Hassell, J. W.	Searcy
Havner, J. B.	Beebe
Henderson, T. W.	Judsonia
Hudgins, A. H.	Griffithville
Jones, J. L.	Searcy
Little, R. L.	Judsonia
Moore, L. E.	Searcy
Peeler, C. M.	Pangburn
Purnell, F. L.	Kensett
Runyan, J. R.	Searcy
Sloan, Dewey W.	Beebe
Sloan, J. R.	Garner
Spain, A. L.	Letona
Tapscott, S. T., Jr.	Searcy

WOODRUFF COUNTY

Biles, L. E.	Augusta
Brewer, E. F.	Augusta
Brewster, B.	McCrory
Brown, E. B.	Cotton Plant
Dungan, C. E.	Augusta
Finch, Carl	McCrory
Fraser, R. L.	McCrory
Gephart, R. T.	Cotton Plant
Maguire, F. C.	Augusta
Morris, J. W.	McCrory
*Osborne, J. M.	Howell
Porter, M. A.	Hunter
Smith, R. N.	Pine Bluff
West, J. H.	Grays

YELL COUNTY

Britt, H. A.	Havana
Linzy, C. B.	Plainview
Montgomery, H. L.	Gravelly

County Societies

OUACHITA COUNTY

(Reported by R. B. ROBINS, Secretary)

The Ouachita County Medical Society held its regular monthly meeting Thursday evening, November 3, at the Camden Hospital.

The following physicians were present: Rinehart, Robins, Powell and Jameson of Camden; J. S. Thompson, Sam Thompson and Evans of Stephens; Hatheock of Loest Bayou; Kennerly and Henry Thompson of Beardon; Clements of Mount Holly; Purifoy of Chidester and Hoge and Carruthers of Little Rock.

A banquet was served by the nurses of the hospital, after which Dr. S. F. Hoge of Little Rock, read a paper on "Cardiac Disease" and Dr. F. Walter Carruthers of Little Rock made a talk on "The Management of Fractures," illustrated by lantern slides.

CRAIGHEAD COUNTY

(Reported by THAD COTHERN, Secretary)

The Craighead County Medical Society met in regular session at the supper hour in the Banquet room over Link's Cafe, November 3, 1927.

Chest diseases was the topic for study and many of these conditions were discussed from various angles. Colds and Pneumonia, with their prevention and treatment were discussed, as well as the early diagnosis and care of Tubercular infections. Dr. Horner discussed the prevention of colds. Dr. O. V. Smith, the treatment of colds, Dr. Willett, the diagnosis and prevention of Pneumonia, Dr. Stroud, the earlier diagnosis and care of Pulmonary Tuberculosis, and Dr. McCurry, a "resume" of Bronchitis.

Each doctor by his discussion showed that he had given the matter some study and everyone was interested. The discussions following these talks was general, everyone having something to say or some question to ask. We all felt that it was "good to be here." Among the out-of town doctors present were Dr. Elders of Harrisburg; Dr. Moreland of Route 4; Dr. O. V. Smith of Bay, Dr. Hull of Mammoth Spring, and Dr. McCurry of Cash. The banquet in the form of a dutch lunch, was served at this hour, and came up to the usual Link Cuisine. There is nothing that a doctor enjoys more than good eats, and everyone was thoroughly satisfied on that score.

It was suggested that our County Society have no second meeting in November and

every doctor is urged to arrange to attend the Southern Medical Association, which will be held at Memphis, Tenn., November 14 to 17, inclusive. Our next meeting will be Thursday, Dec. 1, at which time we shall elect the officers to guide us through the year of 1928. Let us bespeak now a large attendance for this meeting, December 1st.

Book Reviews

Annual Reprint of the Reports of the Council on Pharmacy and Chemistry of the American Medical Association for 1926—With comments that have appeared in *The Journal*. Cloth. Price, \$1.00. Pp. 73. Chicago: American Medical Association, 1927.

Those who are interested in the work of the Council on Pharmacy and Chemistry, and this includes all who have to do with the therapeutic use of drugs, look forward every year to the volume which gives the reasons for the Council's rejection of the preparations found unacceptable for inclusion in New and Non-official Remedies. These reasons are given in the Annual Reprint of the Reports of Council on Pharmacy and Chemistry; in addition the book gives the reasons for the omission of certain preparations from New and Non-official Remedies during the year, and contains several special reports of a general nature authorized by the Council for publication.

The volume contains the following special reports of current interest to physicians: a report on the status of bacillus acidophilus and bacillus bulgaricus therapy, on the basis of which the N. N. R. article on Lactic Acid-Producing Organisms has been revised and rewritten; a report dealing with the esteem in which antistreptococcus serum is now held by leading surgeons, gynecologists and obstetricians, prepared by Dr. Emil Novak on the basis of the answers to a questionnaire sent to representative members of these groups; and a preliminary report on the status of the new drug, Ephedrine.

Principles and Practice of Chemotherapy With Special Reference to the Specific and General Treatment of Syphilis.—By John A. Kolmer, M. D., Dr. P. H., Professor of Pathology and Bacteriology in the Graduate School of Medicine, University of Pennsylvania. 1106 pages with 82 illustrations. Published by W. B. Saunders Company, Philadelphia, 1926. Cloth, \$12.00 net.

The subject of chemotherapy is the treatment of parasitic diseases with any chemical agent and is almost as old as the art of medicine.

The book is divided into ten parts as follows:

Part I, Principles of Chemotherapy; Part II, Chemotherapy of Bacterial and Mycotic Diseases; Part III, Chemotherapy of Trypanosomal Diseases; Part IV, Chemotherapy of Spirochetal Diseases Other Than Syphilis; Part V, Chemotherapy of Protozoan and Metazoan Diseases Other Than Trypanosomal and Spirochetal Diseases; Part VI, Chemotherapy of Diseases of Doubtful or Unknown Etiology; Part VII, Infection, Immunity and Pathology of Syphilis in Relation to Treatment; Part VIII, Pharmacology and Toxicology of Antisyphilitic Medicaments; Part IX, Various Methods for the Administration of Antisyphilitic Medicaments; Part X, Prophylaxis, General Specific and Non-Specific Treatment of Syphilis.

The Diseases of Infants and Children.—By J. P. Crozer Griffith, M. D., Ph. D., Professor of Pediatrics in the Graduate School of Medicine of the University of Pennsylvania, and A. Graeme Mitchell, M. D., Professor of Pediatrics, College of Medicine, University of Cincinnati. Second Edition, Reset. Two Octavo Volumes, totaling 1715 pages with 461 illustrations, including 20 plates in colors. Published by W. B. Saunders Company, Philadelphia, 1927. Cloth, \$20.00 net.

This book represents not only the results of his own vast experience with diseases of children, but he has made use of many valuable contributions by other authors. In this new edition, Dr. Griffith has had the able co-operation of Dr. A. Graeme Mitchell, of the University of Cincinnati. We find much new material in these volumes which should be of particular interest to physicians generally.

The Conquest of Disease.—By Thurman B. Rice, A. M., M. D., Assistant Professor of Sanitary Science, Indiana University School of Medicine. Published by The MacMillan Company, New York. Price, \$4.50.

This book presents the most recent scientific information concerning the transmissible diseases, and the best methods of control and how eventually eradicated. The contents are divided into three parts as follows: Part I, Introduction; Part II, The Transmissible Diseases and Their Prevention; Part III, The Means by Which Transmissible Diseases are Controlled.

THE JOURNAL

OF THE Arkansas Medical Society

PUBLISHED MONTHLY UNDER THE DIRECTION OF THE COUNCIL

Vol. XXIV

LITTLE ROCK, ARK., DECEMBER, 1927

No. 7

Original Articles

CONGENITAL PYLORIC STENOSIS*

L. L. PURIFOY, M. D., El Dorado

There is growing evidence to show that pyloric stenosis, at one time considered rare, is of far more frequent occurrence than is generally supposed.

According to Osler a case of pyloric stenosis was reported by Beardsley (1) as early as 1787. He gave a description of the symptoms and pathology of pyloric stenosis with particular emphasis on the narrowness of the lumen and serous condition of the pyloric tumor. Exactly a century later Hirschsprung (2) gave us a clearer conception of the disease and of later years it has received more liberal attention, especially at the hands of Thomson, Still (14), Downes, Cautley, *et al.* One hundred and twenty cases had been reported in 1905. This same year I saw John B. Murphy do a gastro-enterostomy on an infant three weeks old in the Mercy Hospital at Chicago, that being the operation universally done at that time.

Incidence—It occurs almost exclusively in boy babies and as a rule in the first born. Almost invariably, "The bonniest babies that one could wish to see."

There is a special liability of first born babies to abnormalities.

Etiology—Just what takes place or fails to take place during gestation is not accounted for in the literature.

Pathology—There is considerable divergence of opinion as to whether the pathology is a result of pylorospasm or is congenital in origin, but the pathological picture has presented remarkable uniformity.

We know that the stenosis is caused by an increase or hypertrophy of the circular muscular layer and connective tissue of the pyloric sphincter and a redundancy of the mucous membrane. Due to the stenosis we have a dilatation of the stomach and a compensatory hypertrophy of the stomach wall, proximal to the site of stenosis.

Thomson (3) suggests that the pyloric hypertrophy is secondary to congenital spasm, while Cautley (4) is of the opinion that the hypertrophy is primary and due to pyloric overgrowth.

The pylorus microscopically appears as an oval shaped cartilaginous tumor—almost avascular—the circulation approaching the normal toward the margins.

Diagnosis—The four cardinal symptoms of pyloric stenosis are: (1) visible gastric peristalsis, (2) projectile vomiting, (3) a palpable tumor of the pylorus, (4) constipation.

The symptoms usually begin from the seventh to the twenty-first day, beginning with vomiting during nursing or immediately afterwards, the vomitus containing only milk without any bile. It may be large in amount with a residue of previous feedings. The stools are dark, mucous in character, showing little or no food elements.

Peristaltic waves may be seen over the gastric area running from left to right and ending in a distinct tumor which can sometimes only be felt when the patient is thoroughly relaxed.

The baby soon begins to lose weight rapidly, becomes emaciated and markedly dehydrated.

As regards the diagnosis of the condition, that is of course made from the symptoms.

Holt (5) comments on the diagnosis as follows: "The existence of the tumor is often a matter of uncertainty, but its presence is of considerable positive value." The condition has been mistaken for cerebral disease on account of the projectile vomiting and chronic

*Read before the 52nd Annual Meeting of the Arkansas Medical Society, held in Little Rock, May, 11, 12, 13, 1927.

constipation; for renal disease because of the vomiting and scanty urine, usually, however, the only difficulty is to distinguish between gastric indigestion and pyloric stenosis.

Kerley (6) in writing of the diagnosis says that in all young infants who develop persistent vomiting with constipation or even persistent vomiting without constipation, the possibility of pyloric stenosis should be considered. He places great stress upon the peristaltic wave as a diagnostic sign saying that in no other condition does this special form of peristaltic wave occur.

Röntgenological examinations are of value and regarded as exceedingly so by some writers, but in my opinion merely confirm the clinical findings.

Treatment—With regard to the treatment of this disease, Downes (13) says that if the patient is observed from the onset of symptoms medical treatment may be tried for a period not exceeding ten days, provided that the child's weight loss does not exceed twenty per cent.

If at the end of ten days the patient does not show definite improvement, operation is indicated.

Haas (7) advocates the use of atropine in this condition, and says that this drug, when properly used, has been regularly effective in producing a cure, preferring it to surgical measures. He says that is the logical treatment for both pylorospasm and pyloric stenosis.

A common dose of the drug for an infant of this type, from a few weeks to a few months of age, totals $1/50$ of a grain to $1/25$ of a grain in twenty-four hours, with an extreme of $1/16$ of a grain divided among the day's feedings, a $1/1000$ solution being used, beginning with one drop and increasing rapidly until effective.

The most frequent toxic symptoms which may occur under this treatment are: flushing, mydriasis and dryness, which promptly disappear when the drug is withheld. He says that there is no danger when such symptoms present themselves.

Denzer (8), however, says that at the present time the profession in general is inclined to look upon operative measures as the only method of obtaining relief in most instances.

Abt (9) says that indications for operation are not emphasized by the permanency of the mass, but the fact that it does not disappear

quickly enough is the essential absolute indication for surgical interference.

It seems trite and superfluous to remark that surgical interference in the presence of this lesion must not be regarded as a last resort, yet two or three decades ago dietetic and medical treatment was almost universally regarded as an essential preliminary to be followed by surgical intervention only as a last resort.

It is the child whose condition is recognized early and immediately relieved that passes through a rapid and easy convalescence, and only in those series of cases in which relatively early surgical treatment has been carried out has the mortality been satisfactorily low.

The indication for operation is present when the diagnosis can be made, and the danger is in permitting the natural inclination towards conservatism to prevail.

Pre-operative preparation—A few years ago very little was done in the way of pre-operative care, but now as much time as possible is spent in preparing poor operative risks, as saline hypodermoclysis and glucose by rectum.

Operation—Gastro-enterostomy has been obsolete since 1908, because it did not restore the normal condition and also on account of the high mortality.

At this time Fredet (10) first did his operation making a longitudinal incision of the serous and muscular coats of the pylorus thereby liberating, but not opening, the mucous layer. He then converted the longitudinal incision into a transverse one by suturing. In 1912, Rammstedt modified this operation by leaving out the sutures and allowing the mucous membrane to pouch through the gap.

Here we might suggest the dangers in either operation. Care should be taken that no intestine escapes or even is seen at the wound opening, as infants do not tolerate evisceration. This being one of the exceptions to the rule that a lengthy incision will do as well as a small one.

Post-operative Care—While the patient is still on the operating table two or three ounces of water may be given by rectum and one hour afterwards one ounce of boiled water may be given by mouth. Three or four hours afterwards breast feedings of ten minutes duration should be given and at three hour intervals thereafter.

The results following the Rammstedt operation are equally as satisfactory as any in the realm of surgery.

Report of a Case—Jack David Wolfe, age fourteen days, first born baby, sex—Male. Weight seven pounds at birth.

History—Baby brought to hospital having had constipation, having vomited his feedings for the past twelve hours, vomiting being projectile in character. Up to present illness child was perfectly well. Often times since illness began had been able to retain two or more feedings before vomiting. Very soon water could not be retained. Child became jaundiced, emaciated and dehydrated.

Physical findings—eyes very bright, sclera had a yellowish tint. Mouth, incomplete hare-lip. Abdomen, hard mass size of end of index finger felt just to the right of umbilicus. Genitals—Prepuce extremely long adherent and constricted sufficiently to render urination difficult. All other findings negative.

Operation, November 2, 1926. Rammstedt's pyloroplasty—a longitudinal incision about four cm. in length, in upper right quadrant just to the inner border of the rectus muscle, through skin, fascia and peritoneum. Pyloric tumor brought well into wound, incised longitudinally along anterior upper wall, incision extending from healthy stomach wall, well past pyloric tumor through serous and muscular coats, bluntly separated for a short distance muscular and mucous coats. No blood vessels were encountered, so none were ligated. Wound closed in layers using No. 0 chromic catgut for peritoneum and fascia and dermal suture for skin.

Operation for hare-lip deformity and circumcision deferred to a later date, but preputial adhesions were liberated. Operation well borne, patient reacting while on the table.

Post-operative—75 cc. normal saline given by rectum upon return from operating room. First fluids by mouth were vomited, but few hours later retained. Bowels acted on second day. Nourishment taken frequently in small quantities. Recovery uneventful. Discharged from hospital on the thirteenth day from operation. Patient in good condition on discharge.

BIBLIOGRAPHY

- (1) Beardsley, H., Trans. New Haven Med. Soc., 1787.
- (2) Hirschsprung, Stenosis Pylori Congenita, Hosp-Tid., Kobenh., 1901, 4, R., ix, 1169-1175.
- (3) Thomson, John, Brit. Med. J. 1902, 2, 678.

(4) Cautley, S. and Dent, C. T. Lancet, 1902, 2, 1679-1685.

(5) Holt and Howland, Dis. of Infancy and Childhood, 1925, 8th. ed., p. 319.

(6) Kerley and Graves, Pract. of Pediatrics, 1907 p. 186.

(7) Haas, S. V., J. A. M. A., 1922, 79, 1314-1318.

(8) Denzer, B. S., Amn. Jour. Dis. of Children, 1922, 24, 534-540.

(9) Abt. Isaac A., Pediatrics, v. 3, Chap. li., p. 451, et. seq.

(10) Fredet, P., Archi. d. mal. de l'appar. digest. 1908, 2, 393-417.

(11) Rammstedt, C. Med. Klinik. Nr. 42, 1912, 2, 1702-1705.

(12) Ladd, W. E. Boston Med. and Surg. Journal, 1927, 196, 211-216.

(13) Downes, Wm. A., S. G. O., 1916, 22, 251-257.

(14) Still, Geo. Fred K., Com. Dis. of Childhood, 1924, 4 Ed., 181-199.

DISCUSSION

DR. Wm. DECKER SMITH, Texarkana: The report of this case gave me a great deal of pleasure. Only recently we had two cases under our care.

The first came to us from the city, with a history of projectile vomiting onset two weeks following birth, and as the vomiting continued stenosis was suspected. This case received first thorough medical care. It had been given heavy gruels with comparatively large doses of atropine. Gastric lavage had been practiced prior to admission to the hospital, with no apparent improvement, but a gradual decline in weight. We did a Rammstedt's operation on this patient. Recovery was rapid, and in about three months after the operation the child regained its normal weight.

During the admission of this child in the hospital it was shown to a visiting physician from a nearby town. After hearing a brief history of the case, the physician remarked, he had a similar case at home. I might say here that this physician is very painstaking and his opinion highly respected. Several days later he entered the hospital bringing his small patient with him. Operation was advised and the same findings were present as related in connection with previous case.

I think that a big mistake we make in most of these cases is that we keep up medical treatment too long. I believe every case should receive first thorough medical treatment. Ladd, in his recent article appearing in the Boston Medical and Surgical Journal, considers every case to be surgical except those of the very mild type. The best indication of improvement from medical treatment is the weight. If these small patients continue to show a gradual decline in weight, I believe it an indication for operation. Both of these patients are living and in very good health.

DR. A. C. KIRBY, Little Rock: I happened to have a case just a few days ago which would verify what the essayist said, and part of it would controvert him.

In regard to the absence of hemorrhage, this one case happened to have two little arteries running right over or right through the stenosed part of the cartilaginous area, and both of them caused a good deal of trouble.

Another thing, in the operation, if you can get the incision to the side and not use the mid-line incision, you will do better. In that way you don't have to do so much pulling up on the duodenum and the pylorus to do the incision, and the death

rate is directly proportional to the rapidity of your work and the lack of trauma that is done to the tissues at the same time. The more clever the operator, the quicker he does it; the less pulling and trauma, the higher percentage of cures you will get.

Regarding projectile vomiting, and the peristaltic wave, you have to be careful you don't get hold of the pyloric spasms. In the cases you see, I believe you will find eight or ten actual pyloric spasms to one pyloric stenosis. I have had about three pyloric stenoses to be operated on, and I guess I have had fifty pyloric spasms that responded rather readily to atropine treatment along with feeding as indicated.

DR. DON SMITH, Hope: The gentleman who read this paper is a schoolmate of mine. I am proud of him. I want to correct him on some things, though. How long had this child been vomiting? Twelve hours?

DR. PURIFOY: Twelve hours before the diagnosis was made.

DR. SMITH: You got the case early.

DR. PURIFOY: I guess, two days later.

DR. SMITH: He found the case early. I don't do any surgery. I am a medical man and look at it strictly from a medical point of view. The only indications for the Rammstedt operation for pyloric stenosis is, if you have a case of a long breast-fed infant and you see the case, as you did, very early; that is, before the child gets emaciated. Then, it is all right to go ahead and operate. But if you see these cases, like I have seen them in two instances, brought to you when they are emaciated, I tell you that you better lay off. You can give those children thick feedings, the formula for which you will find in your text books. Simply take some lactic acid milk, if you want, or whole sweet milk and put a syrup in it and give it to them with cream of wheat or farina. Make it thick so that they can't vomit it. Put it in his stomach and give him a lot of atropine. and a lot of times these children will pull out as fast as if you did a surgical operation and you won't have any criticism or get in wrong.

I hardly know how you will make a diagnosis of pyloric stenosis and pyloric spasm. I know I have a very good friend, a pediatrician, and he had a year's training in Philadelphia under good men. He said that when they do go in for pyloric stenosis, real often when they get in there they do not find pyloric stenosis but pyloric spasm. It is hard to tell by feeling because they feel hard. I believe I would change my tactics a little. I wouldn't operate except as you did in the early cases. If you operate in the late cases, you will lose them. Feed them and they will come out of it.

Dr. Smith of Texarkana said to try the medical treatment first. I agree with you thoroughly if you see them late. You better do that. Early, you better have them operate. You and Dr. Purifoy are a little at variance on that. I will put you both right.

If you make an x-ray picture in these cases, you have to put something in there to produce a shadow and it has got to be the barium meal. You get it in there and I want to see you get it out. I had a picture by a good x-ray man. He gave the child a barium meal. I never could get it out of there. The child died, not from the barium meal, however, but from starvation. Don't make x-ray pictures in these cases; that is, don't give the barium meal. Make your diagnosis. If you go in there and it is pyloric spasm, nobody is any the worse. Go on and feed the baby and it will get well.

DR. W. T. FIKE, Warren: I would like to mention a case I saw once. I think about the second or third time that the baby attempted to nurse, it began to vomit, and it was bloody; a sort of wine-colored blood; it wasn't a bright red blood. I couldn't understand what it was. The next day it began to pass the same kind of blood from its bowels and that continued for about three or four days. I didn't know whether I had a stenosis or irritation of the bowels or something else. With a little bismuth, paregoric and atropine, it gradually disappeared.

DR. PURIFOY, in response: We had practically no hemorrhage in this case. As I stated in my paper, the tumor is practically avascular, but the circulation approaches normal near the margin of the tumor.

As Dr. Smith said, we should be careful about operating until we have first made a diagnosis. We should be careful about operating at any time until we have made a diagnosis. As I explained in the beginning, I didn't make the diagnosis in this case, but of the doctor who did, I will say very few times have I checked him wrong. We found a pyloric tumor and the condition was relieved. The baby weighed 7 pounds at birth, 5½ pounds at the date of operation, and weighs 15½ pounds now.

◆

HEADACHES OF UNUSUAL ORIGIN WITH CASE REPORTS*

GEORGE B. FLETCHER, M. D., Hot Springs

Each patient in this series gave headache, unrelieved by the ordinary methods, as the outstanding complaint and it was determined that each headache was due to organic brain disease.

Other symptoms, of course, varied according to the type of lesion represented. It is believed that early recognition of the cause of the headache, in many of the patients, averted either loss of vision, loss of other bodily functions or almost immediate loss of life. Therefore, while nothing new in the matter of diagnosis is suggested there is offered a plea for the early recognition of organic brain disease before irreparable damage has occurred.

This series is composed of twenty-six cases. For the sake of brevity only positive findings are mentioned and only one case, with one exception, under each classification, is described.

The cases are classified as follows:

1. Brain Tumors of all types.....	19
2. Epidemic Encephalitis.....	4
3. Gumma of the brain.....	2
4. Abscess of the brain.....	1
Total.....	26

*Read before the 52nd Annual Meeting of the Arkansas Medical Society, held in Little Rock, May, 11, 12, 13, 1927.

CASE No. 1

A. B.—Female; single; technician. Was reported “nervous” with a slight rise of temperature for several months before she was seen by Dr. Greene, carrying a diagnosis of psychoneurosis for lack of better explanation of the fever. For four weeks she suffered from an intolerable headache, relieved only by morphine. There were short periods when she was without headache, but when the headache was present there was persistent vomiting. The eye ground examination showing choking of the right nerve head and some engorgement of the vessels of the left eye. Reflexes were explosive throughout. There was an area of tenderness in the right occipital region. The only cranial nerve involvement was probably the third, which caused diplopia. A diagnosis of brain tumor was made. Under a local anesthetic a right sided cerebellar glioma was removed. She made a good recovery; there have been no further symptoms. Neurologically she is clear and has returned to full duty. Diagnosis: Brain Tumor (Glioma).

CASE No. 2

L. H., a man 40 years of age, weighing over 200-lbs., was seen March 22, 1923; had a mild attack of influenza in January. About the end of February he developed headache and a few days later began vomiting which continued every day until he was seen. The pulse had been noted to be slow, from 40 to 48 in the morning and about 60 in the afternoon. There had been no fever at any time; but he had been restless and was given chloral to keep him quiet and small doses of iodid. His general physical condition was good in spite of the frequent vomiting. Neurological examination showed the pupils markedly dilated, reacting slowly but evenly to direct light. Ophthalmoscopic examination showed a mild edema of the disc on the left side and of the nasal side of the right disc; deep reflexes over active; no motor paresis or sensory disturbance. A spinal puncture showed the fluid under markedly increased tension with a slight yellowish tinge. After about 25 cc. were withdrawn, the head became comfortable; pulse increased to 84; blood pressure, 116-70. The patient returned home for a few days; then, on March 28, he was again seen with a severe headache, which had not been controlled by the hypodermic administration of morphine and oral administration of codein. Re-examination showed

marked choking of the left disc; veins considerably dilated. Right disc only slightly choked. A spinal puncture was done on March 30, and about 30 cc. of fluid withdrawn. The color was more deeply yellow than at the first puncture; pressure continued high. The headache was relieved, but returned after about two days. Again, about 25 cc. of fluid were withdrawn of even darker color than at the time of the previous punctures. These punctures were made, not only to relieve the headache, but to conserve the vision and delay the changes in the nerve heads until he could have surgery. On April 30th, an unsuccessful attempt was made to remove a glioma of the left temporal and occipital lobes. The patient died several hours after the operation. Sections showed the tumor to be a deep glioma that was extremely vascular. Diagnosis: Brain Tumor. (Infiltrating Glioma).

CASE No. 3

M. A.—26—school teacher. Seen January 18, 1926; he gave a history of a severe attack of influenza in January, 1925; had the usual symptoms. During convalescence there developed sleepy spells; without warning he was overwhelmed with a desire to sleep and might fall asleep while driving his car, playing tennis or whatever else he might be doing. We made a very careful study of him and concluded that the attack, which he described as influenza, was really epidemic encephalitis and that he was suffering from a post-encephalitic syndrome. On May 4, 1926, he developed a very severe headache, was in a state of confusion. The headache was not relieved by the coal tar derivatives, codein or morphine. Temperature, 100. Later he developed emesis. A spinal puncture revealed marked increase in pressure, one plus globulin, slightly increased albumin, 218 cells practically all of which were small lymphocytes with an occasional large mononuclear. The pain was relieved by the puncture; fever subsided and he became clear mentally. On May 25, a second spinal puncture showed only 18 cells, trace of globulin and very slight increase in albumin; pressure was normal. He went along without headache and on March 12, 1927, another spinal fluid investigation showed 4 cells, normal pressure, negative globulin and normal albumin. There have been no further attacks of headache, but the patient continues to have the sleepy at-

taeks. He is carrying a diagnosis of (1) Post-encephalitic Syndrome. (2) Narcolepsy.

CASE No. 4

E. B.—Widow. Practical Nurse. Three healthy children, youngest, thirteen years of age. She came to the office February 25, 1927, complaining of severe headache which had not been relieved by aspirin and codein. She was practically well until four weeks before the above date. She developed headache and began to notice failure in vision. The head pain was more severe after she had been up for several hours. There was vomiting only occasionally accompanied with nausea. She gives a history of pneumonia and typhoid in early life. The appendix and tubes had been removed in October, 1925. There was no history of syphilis. Physical examination showed a well nourished woman apparently in good general health. Temperature 98; pulse, 84; blood pressure, 110-75. There was a slight systolic roughening over the aortic area; other physical findings were not important. Neurological examination revealed equal circular pupils with normal reaction to light and on accommodation. The patellar reflexes were equal and explosive; station and gait were undisturbed. Eye ground examination showed definite choking of both discs; no disc outline could be seen; several small retinal hemorrhages were present. She was unable to read a chart. Blood Wassermann was negative in the alcoholic antigen, one plus in acetone insoluble, four plus in cholestrinized antigen. Spinal fluid was under greatly increased pressure; in fact, it spurted. There were 43 cells, Wassermann positive four plus in 2 cc. in all antigens, globulin and albumin three plus. Diagnosis: Gumma of the brain. The routine treatment with mercury and iodid gave complete relief from headache after ten days; vision improved very much, but when last seen, April 2, 1927, there was still considerable impairment and it appeared that there was going to be some atrophy of the nerve head. She was, however, doing full duty in a hospital.

CASE No. 5

E. P.—M., age 21. On March 22, 1915, the patient rode in from the country about three and a half miles, appeared desperately ill, complaining of an unendurable headache. Three weeks prior he had a "gathering" in the left ear treated by a surgeon with some re-

lief. Four days before he came to the office, the headache became quite severe and increased in severity until he was seen. He was clouded mentally and there was evidence that he was suffering from partial word deafness. Pulse was 38; temperature, 99. There was marked dilation of both pupils; right larger than the left; they were fixed to light and accommodation. Examination of the eye grounds showed fundi flaming red, but no choking. Leucocytes, 20,600. A diagnosis of brain abscess was made. At 2:30 P. M., on the same day a surgeon drained about three ounces of heavy pus after an exploratory opening had been made. There was marked increase of the intra-cranial pressure. He made an uneventful recovery; left the hospital in less than two weeks; was not again heard from until February 9, 1925, about ten years later, when it was reported that he had died from an injury sustained when a truck in which he was riding was struck by a train.

COMMENT AND SUMMARY

1. The ophthalmoscopic findings were of inestimable value especially as indicators of increased intra-cranial pressure and without them we would have been deprived of information that frequently completed our diagnosis. It is urged that an eye ground examination be made in all patients complaining of headaches of obscure origin.

2. Much more can be accomplished when the diagnosis has been established before great damage has been done.

3. Treatment was not intended as a part of this paper.

4. Spinal fluid investigation is of such value that it should be made routinely in such cases always having in mind the possibility of herniation of the medulla in certain types of brain tumors, but this is unlikely to occur if only enough fluid for diagnostic purposes is withdrawn.

5. In many of these patients head pain was the only symptom. There were no focal convulsions or other localizing symptoms, but the eye grounds, spinal fluid, or both, frequently gave the clue necessary to establish a diagnosis.

6. These patients had taken drugs ranging from aspirin to morphine without the relief to be expected in headaches of the ordinary type.

DISCUSSION

DR. M. J. BARLOW, North Little Rock: Headache is a common and at times a very important symptom. If it indicates brain tumor, the early diagnosis means much to the patient; and, the permanent damage to eyes and nerves that not anything can benefit, will warrant the close study of every general practitioner, though in his life time he may not be called upon to diagnose a single case. Headache may be caused by pathology of some organ; but remember, that in that case, if the headache is severe and persistent, there will be marked pain and tenderness at the offending organ. In brain tumors there is a famous tripod, (1) Nausea and vomiting; (2) Headache; and (3) Changes in the eye grounds.

If you have nausea and projectile vomiting and headache severe, with no place where you can positively say there is the trouble, do not wait for eye changes before you suspect brain tumor. You have a case where you should solicit, without a day's delay, the aid of the neurologist.

In case No. 1, the first focal symptom was a true marker as to the portion of the brain involved and headache remained as a guiding finger, pointing to the location of the trouble, until removed by a successful operation at the hands of a brain surgeon.

DR. H. THIBAUT, Scott: Dr. Barlow brought out something to which I would like to call your attention. He said a physician might spend a lifetime in practice without being called on to diagnose tumor of the brain. I suppose by that he must have meant that a great many of us spend a lifetime in practicing without recognizing tumor of the brain; because I can hardly conceive how a man with any practice would fail to run into such. My experience has been that all tumors of the brain I have ever seen have been previously diagnosed as biliousness, and I suspect that we are letting most of them get by. A patient comes in vomiting, with a headache, and they give him some aspirin and a big dose of calomel and diagnose biliousness, and that is the reason we are called on to diagnose so few of them. Under that treatment most of them would be apt to die before any diagnosis was made.

MEDICINE OF THE LAST HALF CENTURY*

T. C. REECE, M. D., Walnut Ridge

Medicine, during the first half of the nineteenth century, was in a restless state, and schools upon schools arose practicing their own fads and fancies, so that Virchow, in 1854, indignantly exclaimed: "German medicine, on account of its views and dissenting schools, has become the laughing stock of the world."

Oertel has graphically described the situation of the time: "There did not exist a well-founded, universal, scientific method of thought, investigation or teaching, but only opposed and battling schools and systems, such as Hahnemann's polygramasia, Rademacher's

system, Priessnitz system, therapeutic nihilism, eclecticism, Bouillauds's bleeding to unconsciousness of the patient, Deitl's absolute condemnation of bleeding as a criminal offense, mesmerism and others."

They formed the source of senseless and useless discussions, for they were all speculative and contributed much to the entertainment of their pompous defenders and the laity, but not much to the benefit of their patients. It was not even a time of crude empiricism, but a fantastic period which like a nightmare in individuals, occasionally arises during the life of a nation.

Some of you will be shocked to know that in one State of our own country, more than ten so-called "Schools of Medicine" were permitted to practice their foolish and ignorant, if not criminal, theories on the credulous, misled and misinformed public. But toward the latter half of the nineteenth century, the advance made in the laboratory began to show the results of their influence on the practice of the healing art.

In Germany, France, England, the United States and in other European and American nations, there have been established clinics and hospitals in connection with Universities, or with research laboratories, where eminent clinical teachers meet their students, and demonstrate and discuss the art and science of medicine.

In the Teutonic countries, Friedrich Theodor Von Frerich was especially famous as an instructor and practitioner. He was a great teacher and delighted especially in the autopsies, which formed part of his clinical instructions. He is famous for having discovered the crystals of leucin and tyrocin in the urine of a patient suffering with acute yellow atrophy of the liver; for his studies in the pathology of hepatic diseases; and for his work in diabetes. In the introduction of his first volume of "Diseases of the Liver" Frerich wrote, "Clinical and practical medicine has made a difficult stand in opposition to the results arrived at by modern means of scientific research." A large proportion of medical men are upholders of the system of practice transmitted from the ancients. They have regard solely to the empirical method of treatment, and take little cognizance of medical science. They look upon this as something extraneous, from which they select what is practically useful, or what may serve for assisting diagnosis,

*President's Address, First Councilor District, Jonesboro, April 20, 1927.

or for the elucidation of individual symptoms, or some kindred purpose, but their general views are not at all influenced by it.

The great clinical teachers of Germany include Kussmaul, Traube, Zeimssen, Von Noorden and many others of international repute. Adolph Kussmaul contributed much to our knowledge of diabetic coma, osteomyelitis, bulbar paralysis, mesenteric thrombosis and many other important subjects.

Ludwig Traube, one of the great Jewish physicians, was an ardent experimentator in pathologic anatomy. His writings on pulmonary diseases, febrile states, suffocation, digitalis and vagus physiology are justly famous.

In England, William Withy, Gull, Samuel Wilks, Fagge, Golding Bird, Thomas Clifford, Albutt and others have been famous clinical teachers and writers.

America and England both boast of Sir William Osler, for while he was a Canadian by birth, he spent the most productive years of his life teaching at the University of Pennsylvania, and at the Johns Hopkins University. In 1904 the mother country called him to her famous seat of learning, and until his death in 1920, in his seventieth year. As a writer of attractive English, as an excellent teacher of medicine, as a brilliant diagnostician, and as a charming medical historian, there are few in England or America that can rival this master of medicine. Other great American physicians are Emanuel Libman, William Sidney Thayer and Frank Billings.

In Psychology and Psycho-pathology great advances have been made in the last five decades. Among the leaders in this science are Pierre Janet, Alfred Binet, Adolph Meyer, Von Krafft-Ebing, Havelock Ellis and others.

A great step forward has been made in the conception of hysteria, and in the psycho-pathology of every day life, by the work of the Jewish physician, Sigmund Freud of Vienna. His writings are epoch making, and have found many exponents of his teaching in men like A. A. Brill, W. A. White, and J. J. Putnam of America.

In the study of therapeutics and physiology a new science was developed, that of Pharmacology. Huge steps have been taken in the study of the action of drugs on the animal economy, but very much more work is to be done to make this an exact learning. It seems that there is a relationship, some claim a definite one, between the constitution of a sub-

stance and its physiological effect, so much so, that Emil Fischer made deliberate attempts, in 1904, to produce a reliable hypnotic and synthesized Veronal.

The greatest German Pharmacologist is Oswald Schmeideberg, a pupil of Rudolph Buchheim (1820-1879). He was the first to study the action of poison on the frog's heart. Contemporary with him are Karl Binz (1832-1912), and Hans Meyer in Germany. In America the work of Woods, Able, Hunt, Sallmann and Samuel James Meltzer are noteworthy. The famous pharmacologists of England are Sir Thomas Lauder Brunton and Arthur Robertson Cushney.

With the dawn of modern chemistry, the development of methods for the medico-legal recognition of poison, reached a very high point, though as Witthaus states, "It's far short of what it will attain in the future." According to this great toxicologist, there are six events in the development of this great science. The first of these is the practical application of the previously observed properties of hydrogen arsenide to the detection of arsenic, by James M. Marsh (1836), whose technic, though modified, is still the basis of all delicate tests for arsenic. Then in 1839, Orfila extracted notable quantities of arsenic from the liver, spleen, kidneys, heart, and muscles of the assassin-suicide, Soufflard, this being the first instance of the extraction of absorbed arsenic from the human cadaver. Five years later Fresenius and Von Babo developed a process for the systematic investigation for all mineral poisonings. So far as organic toxicology goes, the separation of the vegetable alkaloids from medicinal and poisonous plants, beginning with the studies of opium by Serturner, 1805, marked a new departure in toxicology and pharmacology. Stimulated by the necessity for isolating nicotine in a case of suspected poisoning, Stas, in 1851, devised a scheme for the separation of alkaloidal poisons from the cadaver, which, though modified, is still in general use.

In 1874, Selmi demonstrated that the substance which had been extracted from an exhumed body, and which was supposed to be morphine, upon analysis, was in reality not morphine, but a putrid product, a ptomain or cadaveric alkaloid.

"Medicine," says Prof. Vaughn, "consists of the application of scientific discovery to the prevention and cure of diseases. All else

which may go under the name of medicine is sham and fraud."

The public authorities, aided by the advice of the medical profession can save more lives by the prevention of disease, than by permitting the disease to develop and endeavor to cure it later. It is this principle that has almost eradicated typhoid fever in the community, made smallpox a rare disease, and cholera an unknown affliction. The installation of systems of filtered water and good sewerage, the passage and enforcement of laws tending to regulate the building of residences for the poor, and the control by local health board, of persons suffering with contagious disease, and the free distribution of smallpox vaccine, and diphtheria and tetanus anti-toxin, have done more to lower the mortality list than the use of the senna and rhubarb of the therapist.

It is to the prophylaxis of disease that the future generation will owe its safety.

The great German physician Max V. Pettenkofer (1818-1901) inaugurated the science of experimental hygiene. He studied the effects of various diets on health, the influence of ventilation of dwelling houses, methods for estimating carbon dioxide in the air, the relation of atmosphere to clothing, and the relative advantage of stove and hot air heating in houses. The government now regulates the health surroundings of the working people, and stringent laws are passed to secure sanitary shops and homes for laborers. Industrial hygiene will do much to eradicate and alleviate poverty among the working classes. In most civilized countries children under puberty are not allowed to work in the factories, and while in certain States of the Union, a benighted spirit still reigns supreme, Congress is attempting, by heavy taxation, to force those southern States employing child labor to forego this method of exploitation.

Comparable to all the great advances of the past century is the progress in the establishment of modern hospitals where women do the ministering work to the sick. For in this noble pursuit, womanhood has attained its most beneficent influence to the community. Women serve now to lessen the suffering of the sick, to attend his personal comfort and console him in his greatest pain and grief.

It was Theodore Fliender (1800-1864), a pastor, who originated the idea of training women in the care of the ill. His idea was

originally to teach discharged female prisoners how to go about the sick. But it is to the great Englishwoman, Florence Nightingale (1823-1910), that credit is due for establishing a teaching institution where noble-hearted women could be taught how to take care of those who suffer with bodily ailments. During the Crimean war (1854) she went out with a body of nurses to minister to the sick and wounded brought in from the battle field. Since then, women play as important a role in war as men, for while the soldier aims only to destroy and kill, the nurse helps the physician in reclaiming the injured and crippled from death.

The future of medicine is in the advancement of the scientific work done in the laboratory. But we really expect more medical changes in the next half century than we have had in the past. We have a few fossilized minds that do not believe in the progress of medicine, or that we will achieve anything greater than our present state, but that will not in any way retard the onward march of the grand old profession that has the interest of the people at heart.

More hospitals are being built every day where the unfortunates can be cared for; clinics are being organized in every little city, where all sorts of laboratory work is being scientifically done, and where master minds work together for the advancement of this great science. The profession at large is becoming more congenial, and when we dismiss lucre as our God, we will march on, hand in hand, to the consummation of the great plans designed by the fathers of medicine.

Since my time—and I see a few here older than myself, or at least they look older than I feel—the practice of medicine has almost completely been revolutionized, and I feel like the science is just cutting its milk teeth, and what the future is to be like no one can tell. The ancient, as well as the modern philosopher, desired to divine the future by means of geometrical figures; the pretty maiden who counts the petals of the daisy and the dandelion to learn whether her lover will be constant; the man of affairs who allows the clairvoyant to pass on the lines of his hand; the thousands of refined and educated people who sit around the table of the fortune teller as she cuts the cards and pretends to tell him what the future holds in store are common examples

in life of the vain endeavor to raise the curtain which hides what is to be.

This, gentlemen, can never be; but the same tricks will be being pulled off when Gabriel blows his horn. We, of the healing art, like others, are falling by the wayside, but let our lives so be that when we have passed into the great Unknown, we will leave "footprints on the sands of time" that will evidence our having lived. Time moves on, and there may be those who would wish for the power to command "the sun to stand still on Gibeon," and "thou Moon, in the valley of Ajalon." But the miracles of the days of Joshua are passed, and neither the sun of science, nor the moon of meditation will halt in their glorious path of ultimate liberation of the world from moral, political and physical disease.

Abstracts

TULAREMIC PERITONITIS

The case reported by S. C. Fulmer and M. J. Kilbury, Little Rock, Ark. (Journal A. M. A., Nov. 12, 1927), apparently was an ordinary attack of tularemia until abdominal complications arose three months after the initial infection. The abdominal condition resembled that of a low grade peritonitis with ascites and gaseous distention. *Bacterium tularensis* was isolated from ascitic fluid for the first time. The organism grew best on glucose cystine meat infusion agar, of pH 7.3.

Book Reviews

A Textbook of Clinical Neurology.—By Israel S. Wechsler, M. D., Assistant Professor of Clinical Neurology, Columbia University, New York; Attending Neurologist, The Montefiore Hospital, New York. Octavo volume of 725 pages with 127 illustrations. Published by W. B. Saunders Company, Philadelphia, 1927. Cloth, \$7.00.

This work is based mainly on the author's personal clinical experience, representing in a great measure an individual approach to bedside neurology. The first part describes his method of examination, which follows with part two, "The Spinal Cord;" Part 3, "The Peripheral Nerves;" Part 4, "The Brain," and closes with Part 5, "The Neurosis."

Mineral Waters of the United States and American Spas.—By William Edward Fitch, M. D.,

Member of the International Society of Medical Hydrology. Illustrated. Published by Lea & Febiger, Philadelphia, 1927. Price, \$8.50.

In this volume are described 425 active spring areas, with analyses of 871 springs. Authoritative information is given showing the importance and great therapeutic value of American mineral waters. Arkansas' famous Hot Springs comes in for much favorable comment.

Transfusion of Blood.—By Henry M. Feinblatt, M. D., Assistant Clinical Professor of Medicine, The Long Island College Hospital, Brooklyn, N. Y., Hematologist to the United Israel-Zion Hospital. Illustrated by twenty-four engravings. Published by The MacMillan Company, New York, 1926.

The author of this book describes the subject of blood transfusion, and the best methods used at this time. The indications for blood transfusions, Dr. Feinblatt enumerates as follows: Sudden losses of blood from any cause. Surgical shock. Illuminating gas poisoning. Chronic hemorrhagic diseases of the blood. As a preoperative precaution when the bleeding and clotting time has been found to be delayed. Blood dyscrasias. Subacute systemic bacterial infections. Acute septic conditions. Diabetic coma. Debilitated conditions. Miscellaneous indications.

Four Thousand Years of Pharmacy.—An Outline History of Pharmacy and the Allied Sciences.—By Charles H. LaWall, Ph. M., Phar. D., Sc. D., F. R. S. A., Professor of Theory and Practice of Pharmacy and Dean of the Philadelphia College of Pharmacy and science; Joint Editor of the Seventh Edition of Remington's Practice of Pharmacy. Illustrated. Published by J. B. Lippincott Company, Philadelphia. Price, \$5.00.

This most interesting volume opens with a chapter on "Ancient Pharmacy" and follows down with interesting features to the last two chapters, Number 20 and 21, which pertain to the progress of pharmacy in the 19th and 20th century.

A Primer for Diabetic Patients.—A Brief Outline of the Treatment of Diabetes with Diet and Insulin, Including Directions and Charts for the Use of Physicians in Planning Diet Prescriptions. By Russell M. Wilder, M. D., Section on Nutrition, Division of Medicine, Mayo Clinic. Third Edition, Reset. 12mo of 134 pages. Published by W. B. Saunders Company, Philadelphia, 1927. Cloth, \$1.50 net.

The purpose of this book is to provide a text that will serve as a guide, not only to the patient, but also to his teacher, the physician. Each chapter describes clearly and concisely what may be expected from treatment and what rules to follow.

THE JOURNAL

OF THE

ARKANSAS MEDICAL SOCIETY

Owned by the Arkansas Medical Society and Published under the direction of the Council.

WILLIAM R. BATHURST, Editor
810-812 Boyle Building, Little Rock, Arkansas.

Published Monthly. Subscription \$3.00 per year; single copies 25 cents.

Entered as second-class matter, June 21, 1906, at the postoffice at Little Rock, Arkansas, under the Act of Congress of March 3, 1879.

Acceptance for mailing at special rate of postage provided for in Section 1103, Act of October 3, 1917, authorized August 1, 1918.

The advertising policy of this Journal is governed by the rules of the Council on Pharmacy and Chemistry of the American Medical Association.

All communications of this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the State. Notice of deaths, removals from the state, changes of location, etc., are requested.

OFFICERS OF THE ARKANSAS MEDICAL SOCIETY

HENRY THIBAULT, President.....	Scott
R. H. T. MANN, President-Elect.....	Texarkana
HOMER SCOTT, First Vice-President.....	Little Rock
J. B. WHARTON, Second Vice-President.....	El Dorado
O. J. T. JOHNSTON, Third Vice-President.....	Batesville
R. J. CALCOTE, Treasurer.....	Little Rock
Wm. R. BATHURST, Secretary.....	Little Rock

COUNCILORS

First District—W. W. VERSER.....	Harrisburg
Second District—J. L. JONES.....	Searcy
Third District—M. C. JOHN.....	Stuttgart
Fourth District—W. T. LOWE.....	Pine Bluff
Fifth District—L. L. PURIFOY.....	El Dorado
Sixth District—B. C. MIDDLETON.....	Texarkana
Seventh District—DEWELL GANN, SR.....	Benton
Eighth District—ANDERSON WATKINS.....	Little Rock
Ninth District—SAM G. DANIEL.....	Marshall
Tenth District—THOMAS DOUGLASS.....	Ozark

COMMITTEES

SCIENTIFIC PROGRAM—R. J. Calcote, Little Rock, chairman; A. D. Cathey, El Dorado; O. A. Carruth, Little Rock.

SCIENTIFIC EXHIBIT—Chas. E. Oates, Little Rock, chairman; O. C. Melson, Little Rock; M. V. Russell, El Dorado.

STUDENT LOAN FUND—E. F. Ellis, Fayetteville, chairman; Henry Thibault, Scott; Wm. R. Bathurst, Little Rock. NECROLOGY—F. A. Corn, Lonoke, chairman; M. C. John, Stuttgart; Geo. B. Fletcher, Hot Springs.

MEDICAL LEGISLATION—Frank Vinsonhaler, Little Rock, chairman; M. D. Ogden, Little Rock; A. C. Watson, England.

HEALTH AND PUBLIC INSTRUCTION—John R. Dibrrell, Little Rock, chairman; Anderson Watkins, Little Rock; E. L. Watson, Newport.

CANCER CONTROL—A. M. Zell, Little Rock, chairman; A. A. Gilbert, Fayetteville; W. E. Stallings, Newport.

INFANT WELFARE—Clinton A. Rice, Rogers, chairman; A. C. Kirby, Little Rock; H. A. Ross, Arkadelphia.

HOSPITALS—W. G. Eberle, Fort Smith, chairman; J. A. Foltz, Fort Smith; J. W. Butts, Helena.

Editorial

Again The Yuletide

Once again it is a duty and the pleasure of the Journal's editor to tender his best wishes for the happiness and prosperity of its readers. Despite the drawbacks of the present year, because of the disastrous floods of the spring and summer, the people of Arkansas have much for which to be thankful. Terrible as was the loss by flood, things, as always, might have been worse. There was fear that serious epidemics might follow the abatement of the waters, but, thanks to the intelligent efforts of our State Board of Health, as well as to the personal efforts of physicians acting as individuals, this added threatened disaster was averted. Advices from many parts of the flooded districts show that after all crops were raised and the increased price of cotton will make up for the short crop. Our Bankers say money will be plentiful for all legitimate needs and all advices from business leaders indicate a period of unobstructed prosperity.

Now in this gladsome time of the year, when all alike should display the Christmas spirit of good will toward men, let us share what modicum of prosperity we may have enjoyed with our less fortunate fellowmen. Let your largess extend to such as need help and pleasure and happiness. Think of the many underprivileged ones, those who are down on their luck, perhaps from no fault of their own, and those who never have had any luck except bad luck. But, let us cease sermonizing and conclude by wishing every reader a Happy Christmas and prosperous New Year.

AN HONOR TO ARKANSAS

The Southern Medical Association at its annual meeting held in Memphis, November 14-17, elected William R. Bathurst of Little Rock, president. As, of course, every member of the Arkansas Medical Society knows, Dr. Bathurst is the secretary-editor of the State Society. But, he does not accept this honor as a personal tribute to himself as an individual or for any special executive ability, rather it is accepted as an honor to the State he represents.



WILLIAM R. BATHURST

Arkansas has many members in the Southern Medical Association, and its registration at the recent meeting was very gratifying. However, the best form of appreciation which Arkansas can take for thus honoring this State by making one of its members the executive officer, is to center its energies on an increase of membership. This we hope will be done.

As secretary of the Arkansas Medical Society and editor of the Journal, he has conscientiously striven to give to the society the best that he possesses and will as earnestly

strive to acceptably discharge the duties incumbent upon him as President of the Southern Medical Association.

Hundreds of letters and telegrams of congratulation have been received from physicians and lay friends, some of which follow:

Dear Doctor:

Allow me to congratulate you on the signal honor conferred by your election as president of the Southern Medical Association. We all feel that we share to some extent, in your honors because of your long association with St. Vincent's, here in Little Rock. So we claim that this distinction you have acquired reflects pleasantly upon ourselves. Wishing you continued success and every good thing.

Yours very sincerely,

J. P. Fisher,

Director of Hospitals.

Dear Doctor:

I regret very much not seeing and speaking to you while in Memphis at the Medical Association. I met Lemons, White, Hughes, Gurney, Garrison and quite a number of other physicians from Arkansas which was a delight to me. However, permit me to take this opportunity to congratulate you upon the deserved honor that has been conferred upon you in your election as President of the Southern Medical Association. One of the greatest Medical Associations of the world has taken no backward step nor misplaced its confidence in thus selecting you as its leader and guide for the coming year.

With the best of good wishes,

Fraternally yours,

F. Michael Smith, M. D. Health Officer,
Field Agent, U. S. Pub. Health Service.

Dear Doctor:

I have just learned of your election as President of the Southern Medical Association at its recent meeting at Memphis, Tenn.

This meritorious organization composed as it is of a large number of the South's most active medical men, has proven not only a great hand maiden to organized medicine, but filled a void left by its more formidable and unwieldy body, our grand old American Med-

ical Association, to which we all *swear allegiance* and love.

Now, my dear Dr. Bathurst, will you permit me to say that I have watched you most carefully since your entrance into the profession of medicine, have been thrown with you many times in your official capacity, believe I know you pretty well socially, and I say conscientiously, and without fear of contradiction, the Southern Medical Association has only honored itself in electing you its President.

With my hearty congratulations, believe me

Sincerely and cordially yours,

Jas. H. Lenow.

Dear Doctor:

Congratulations for election of president Southern Medical Association. At Rotary Club today attention of Rotarians was called to this honor and resolution passed congratulating you. Thought you would like to know of it and personally I could not resist wiring my personal pleasure and congratulations to you.

Sid M. Brooks.

Dear Doctor:

On behalf of the Little Rock Chamber of Commerce and myself personally I want to congratulate you upon your election to the office of President of the Southern Medical Association.

I congratulate you upon the honor which has come to you personally, and also upon the fact that you have brought honor to the City of Little Rock and the Little Rock Chamber of Commerce.

With very best wishes, I am

Yours very truly,

C. F. Holland, Manager.

PRO AND CON

Conducted by OLIVER C. MELSON
Little Rock

The September Medical Clinics of North America contains a wealth of information. It is composed of material from the Saint Louis hospitals, and I wish to herewith give a brief digest of some of the papers which seemed most attractive to me.

William Engelbach writing upon infantile defectiveness makes the astounding statement that one out of every seven children born has a major defect of development. By major defect he means one which seriously impedes a child's physical and mental progress, and frequently causes the afflicted to be dependent upon either its family or upon the public. He classifies defects into two groups, those which are amenable to treatment and those which are not. In the first group come those deficiencies due to ductless gland disorders such as cretinism and myxedema from the thyroid, juvenile adiposity and Froehlich's syndrome from the pituitary, spasmophilia from parathyroid, pubertas precox from the pineal, and the disorders of the suprarenal. Hereditary syphilis produces many defectives who may be reclaimed if treatment is instituted early and the nervous system is not too grossly involved. The incurable group embraces such conditions as amentia, moronity, mongolism, microcephalus, macrocephalus, hydrocephalus, spastic paralysis, cerebral palsy, eclamptic or epileptic idiocy, birth palsy, hypertrophic idiocy, amaurotic family idiocy, Little's disease, and progressive muscular atrophy.

Speaking of the age of delinquency, Engelbach quotes the results of some investigations in New York penal institutions. Forty-five per cent of the inmates of Sing Sing prison were under the age of twenty-five; of 3,053 prisoners in New York City, sixty-two per cent were under twenty-five; and of persons convicted in the courts of New York State in 1925, forty-six per cent were between the ages of sixteen and twenty-five.

The importance of early diagnosis is emphasized, and the author states that the diagnosis of mental aberrancy in children is usually deducible from physical signs during the first year of life. Several case reports are included in the article illustrating the curable defectives.

Doctor Engelbach certainly has brought out some astonishing facts and it would seem that a percentage of the criminals could be relieved of their desires by an adequate survey of their physical and mental make-ups by competent medical men.

Do you know what a phytobezoar is? It is a food concretion in the human stomach. They are of interest because of their rarity. Doctor J. W. Larimore reports two cases occurring at the Barnes Hospital. One was a mass similar

to putty. The second proved to be of persimmon residu.

The presence of these concretions in the human shows again our evolution for not infrequently are they found in ruminants, and were at times thought to have medicinal qualities.

The diet problem in chronic bile-tract disease is the subject of the clinic by Doctor O. P. J. Falk at St. John's Hospital. His conclusions seem rational and worthy of repetition verbatim.

1. That the giving of concentrated bile salts in chronic cholecystitis, in the hope of stimulating the bile flow through the gallbladder, is illogical, although it does stimulate the flow of bile through the bile-ducts.

2. That the emptying of the gallbladder is produced by an active contraction of that organ rather than a flow of bile from the liver. Therefore the attempt to drain the gallbladder by the Meltzer-Lyon method is useless.

3. That the maximum contraction response seems to occur when the bile-tract is in maximum tone, as in a state of relative hunger.

4. That of the various foods, fat causes the maximum contraction and hence the most efficient emptying of the organ.

5. That the complete emptying of the organ is the best method of preventing stasis.

6. That the factors most contributory to gallstone formation are gallbladder stasis and disturbance in cholesterin metabolism.

7. That there is in certain chronic gallbladder disturbances a tendency to hypercholesterin, which can be minimized by a diet low in cholesterin.

8. That olive oil is the fat least productive of cholesterin, and yet an efficient gallbladder stimulant.

9. The rational dietetic regime in chronic gallbladder disease therefore would consist of:

(a) Infrequent feedings (two per day) of low cholesterin content, containing a limited quantity of olive oil (one tablespoonful).

(b) The drinking of hot water before meals.

(c) Limited caloric intake in cases complicated by obesity.

What a pity it seems that we do not limit our intake of foods of high cholesterin content before we develop the gallbladder disease! Perhaps a little missionary work along this

line would eradicate one of the common ailments of today. True, our pleasure at the festive board would be curtailed, but maybe the axiom of fair, fat, forty and gassy would disappear.

A few months ago the papers were publishing notices of the discovery of the organism causing trachoma. In reading a report of the work in the Journal of the American Medical Association, I was struck by two things which Noguchi says. First, he entitles the paper, "Experimental Production of a Trachoma-like Condition in Monkeys." I think I can see a heavy line drawn under that "like" so that there would be no mistaking its presence. Secondly, attention of the reader is drawn to the fact that the cases studied were in the Indians near Albuquerque, New Mexico.

The news value of the story would have been lost, if that "like" had been allowed to stay put. So the laity think that the cause of trachoma has been discovered.

Noguchi expresses doubt whether the Indian type of trachoma and that seen in other countries is the same.

So far as the work itself is concerned it is of the same high type that has characterized all of Noguchi's. He isolated the organisms, grew them in pure culture, produced the lesions of trachoma in monkeys by injection of the organism into the conjunctival sac, passed the organism thru a series of monkeys in which the characteristic lesions were produced, and finally recovered the organism after such passage thru animals.

Still, Noguchi says it is "trachoma-like."

The next Clinical Congress of the American College of Surgeons will be held in Boston, Massachusetts, October 8 to 12, 1928.

Abstracts

CONSIDERATION IN CIRRHOSIS OF LIVER

In the classification of liver cirrhosis proposed by Leonard G. Rowntree, Rochester, Minn. (Journal A. M. A., Nov. 5, 1927), an attempt is made to present the types, the sub-varieties and etiologic factors most frequently encountered. Two primary groups are: I.

Portal or ascitic cirrhosis; II. Biliary or icteric cirrhosis. These two groups are subdivided into: I. (a) Portal cirrhosis with ascites and small liver (Laennec); (b) portal cirrhosis with ascites and large liver; (c) portal cirrhosis with ascites and jaundice; (d) large liver without ascites as portal cirrhosis in preastatic stage. II. (a) Biliary cirrhosis without extrahepatic obstruction; (b) biliary cirrhosis with extrahepatic obstruction; (c) biliary cirrhosis with ascites (end-stage). The serologic evidence is extremely important in the diagnosis of syphilis of the liver; in 90 per cent of Mayo Clinic cases the Wassermann reaction was positive. In cirrhosis of the liver, functional tests yield information of great practical value, especially in the portal type. In the absence of jaundice, retention of dye may constitute the only functional evidence of hepatic insufficiency. It would appear to reveal the true function of the organ and to reflect the resultant or balance of the processes of degeneration and regeneration. From the standpoint of treatment, and especially in regard to surgical risk, the extent of the dye retention is of considerable value, but only in a general way. The crucial question, so far as the indication for surgical measures in the biliary tract is concerned, is whether or not extrahepatic obstruction exists, and this is revealed most satisfactorily by the presence or absence of the bile in the duodenal contents or in the stools. In utilizing functional tests, however, one should not overlook the time-honored routine examination of the urine and stools for bile and biliary products. The duodenal contents often afford most valuable evidence concerning actual excretion of bile into the intestine in the presence of extrahepatic obstruction. Tests of fragility of erythrocytes and of coagulation time are also sometimes of great significance in various forms of cirrhosis. In the prevention of cirrhosis, the following are probably of importance: (1) the prevention and control of certain infectious diseases; (2) control of alcoholic beverages and certain foodstuffs and condiments; (3) protection in the industries against the deleterious effect of phosphorus, copper, phenylhydrazine and tar, airplane dope and trinitrophenol, and (4) adequate attention to focal infection, especially in the gallbladder and appendix. In the treatment of cirrhosis of the liver, the use of constitutional specifics has

come into consideration. These include mercury, iodine, arsenic, arsphenamine and its derivatives, emetine, quinine, antimony and potassium tartrate (tartar emetic), bismuth and vermicides. Certain substances, such as water, dextrose and calcium, appear to possess a specific virtue from the standpoint of the liver itself and might be considered hepatic specific. On the mechanical side, the relief of biliary obstruction by surgical measures is all important. Transduodenal drainage may prove of help in some instances, but appears to be of most value in cases of postarsphenamine jaundice. The relief of ascites in portal obstruction is often effected surgically by paracentesis, by omentopexy, the Talma-Morrison operation, or by splenectomy. The ascites may be dissipated also by means of medical management, through the use of merbaphen, ammonium salts, and the restriction of salt and water. Protection from hemorrhage in jaundice, particularly surgical hemorrhage, may be provided by the use of calcium, transfusions and the administration of adequate amounts of carbohydrates and water. Anemia is best met by prevention of hemorrhage, by transfusions and possibly by feeding liver. Symptomatically, pruritus may sometimes be relieved by courses of calomel and of emetine. In other instances, diathermy and sweating may prove of value. Local applications of emollients are usually tried and found wanting. In Rowntree's experience calomel has proved the most effective agent. This is given in doses of from 0.016 to 0.03 Gm. up to 0.13 Gm. a day for periods of three or four days. Diet and sedatives may help to control gastrointestinal disturbances. In the treatment of hepatic insufficiency, the administration of large quantities of dextrose solution is of value.

Personal and News Items

The Civil Legion, a National Organization composed of those who in non-uniformed activities rendered patriotic service to the National Cause, during the World War, has held its Second National Convention and elected as its officers the following:

National President, Charles R. Wilson of West Virginia.

Members of the State Executive Committee of Arkansas include: Dr. Leonard R. Ellis of Hot Springs; Dr. Claiborne J. March of

Fordyce; Dr. Wm. R. Hunt of Clarksville; Dr. B. L. Ware of Greenwood; Dr. Thomas J. Woods of Evening Shade; Dr. H. D. Wood of Fayetteville.

National Headquarters are at 163 West Washington Street, Chicago, Illinois.

The Civil Legion is to its members what the American Legion is to the ex-serviceman.

Miss Willie May Brewer, educational and corrective work with exceptional children. Telephone 9468, 521 Federal Bank and Trust Bldg., Little Rock, Ark.

Dr. I. N. McCollum of Conway was recently appointed local surgeon for the Missouri Pacific Railroad.

Dr. E. C. Hunt has moved from Harmony to Russellville.

We wish to announce with deep sorrow the death, on November 13, 1927, of Mr. Samuel William Fairchild of the firm of Fairchild Bros. and Foster.

Dr. S. A. Southall formerly of Lonoke and Smaekover has moved to Stinnett, Texas.

Mr. H. G. Harcrow of Dallas, Texas, has been appointed superintendent of the Baptist State Hospital, Little Rock.

WANTED—Salaried appointments for Class A physicians in all branches of the medical profession. Let us put you in touch with the best man for your opening. Our nation-wide connections enable us to give superior service. Aznoe's National Physicians' Exchange, 30 North Michigan, Chicago. Established 1896. Member the Chicago Association of Commerce.—(Adv.)

The staff members of the State Board of Health and Bureau of Vital Statistics gave a dinner dance at the home of Mrs. Brown, Little Rock, November 30, complimenting Dr. Wm. R. Bathurst, President, Southern Medical Association, and Mrs. C. W. Garrison, President-Elect, Woman's Auxiliary, Southern Medical Association.

Dr. C. S. Pettus has recently returned from a visit to Oxford, Mississippi.

At the El Dorado meeting of the State Society the following resolution will be voted on:

RESOLVED, that the Constitution and By-Laws be amended so as to include a Publicity Committee.

THEREFORE, the following amendment is proposed to add to Chapter VIII, Section I, page 19, to include among the standing committees, that of "A Committee on Publicity."

On page 122 in the November issue we printed an editorial comment on "A New Method of Medical Licensure—The Basic Science Law." We ask our readers to study this method and seriously consider the advisability of such a law for Arkansas.

The Annual Conference of Health Officers met in Little Rock, December 6-7-8. Among the distinguished speakers were Dr. A. T. McCormack of Louisville, Dr. Joseph Goldberger, Dr. J. C. Townsend, Dr. L. L. Lundsen and Dr. Carl Michel of the U. S. Public Health Service.

The Cotton Belt Surgeons Association held its annual meeting in Texarkana, December 7. About 50 members were present from Arkansas, Texas, Louisiana, Tennessee, Missouri and Illinois.

Drs. J. P. Runyan, L. D. Reagan and Paul Mahoney of Little Rock attended the recent meeting of the Rock Island surgeons at Omaha, Nebraska.

Dr. B. A. Rhinehart has returned from New Orleans where he attended the recent meeting of the Radiological Society.

At a recent meeting of the Saline County Medical Society, the following officers were elected for 1928: President, Dewell Gann, Sr., Benton; Vice-President, J. D. Wright, Mabelvale; Secretary-Treasurer, T. E. Buffington, Benton.

Dr. C. W. Garrison, State Health Officer for Arkansas for the past 13 years, was re-elected for four years at an executive session of the State Board of Health, December 7, 1927.

At a meeting of the Craighead County Medical Society, December 1, the following officers were elected:

President, H. A. Stroud, Jonesboro; First Vice-President, J. W. Elder, Harrisburg; Second Vice-President, L. H. McDaniel, Tyronza; Secretary, P. W. Lutterloh, Jonesboro; Treasurer, H. H. McAdams, Jonesboro; Censor, A. G. Scott, Jonesboro.

MRS. GARRISON HONORED AT RECENT MEETING OF THE SOUTHERN MEDICAL ASSOCIATION

Mrs. C. W. Garrison, Little Rock, wife of Dr. C. W. Garrison, State Board of Health officer, was elected president-elect of the Woman's Auxiliary of the Southern Medical Association at Memphis, November 14-17.

Other officers are: Mrs. Arthur T. McCormack of Louisville, Ky., president; Mrs. O. M. Marchmann of Dallas, 1st vice-president; Mrs. M. H. Bell, second vice-president; Mrs. J. N. Brawner of Atlanta, recording secretary; Mrs. J. M. Sams of Kentucky, corresponding secretary; Mrs. W. K. West of Oklahoma City, treasurer; Mrs. B. F. Turner, Memphis, parliamentarian.

At a meeting of the Greene County Medical Society, December 8th, the following officers were elected for 1928:

President, F. M. Scott, Paragould (re-elected); First Vice-President, J. J. Hudgins, Marmaduke; Second Vice-President, G. T. Hopkins, Paragould; Secretary-Treasurer, W. M. Majors, Paragould (re-elected).

The Union County Medical Society met December 6th and elected the following officers: President, J. M. Sheppard, El Dorado; Vice-President, M. V. Russell, El Dorado; Secretary, G. D. Murphy, El Dorado; Delegates to the State meeting, J. Vance Ferguson and J. A. Moore.

Dr. Vernon Tarver of Huttig was elected to membership and Dr. Hasting of El Dorado and J. M. Smith of Smackover transfers.

Abstract

HOW STATE AUXILIARIES ARE ORGANIZED

It is felt that the following suggestions from the national president, Mrs. John O. McReynolds of Dallas, giving some plain facts about

the national organization, may be helpful to county presidents, councilwomen and committee chairman, in carrying out the program as advanced by the Liaison Board of the American Medical Association:

"It is useless to try to interest the wives unless their husbands believe in the Auxiliary.

"A member of the national organization committee should be invited to appear before the House of Delegates. If the Auxiliary receives the endorsement of that body, the State President of the Medical Association then appoints the capable wife of a physician to assist the organizer in calling together the wives of physicians who are attending the meeting. If they vote to organize an auxiliary the officers are elected and the newly elected president appoints her committees.

"Ordinarily the officers are: President, president-elect, four vice-presidents chosen from each section of the State, secretary, treasurer, auditor and parliamentarian.

"The president appoints her own corresponding secretary.

"The standing committees may be Organization, Finance, Health Education, Hygeia, Program and Public Relations.

"The chairman of these committees, the officers and State presidents constitute the executive board, which should meet and discuss plans for the year.

"At first the most important work is the organization of Auxiliaries to the County Medical Societies over the State. The State president of the Auxiliary should write a letter to each president of county medical societies to ascertain if they desire an Auxiliary. If the medical society endorses the Auxiliary, one of the State organizers is put in touch with the wife of one of the members of the county medical society who will call the wives together for organization. If possible, the chairman or some member of the organization committee meets with the physicians' wives to aid them.

"It is recommended that each Auxiliary send its president, president-elect and two delegates and their alternates to the annual session which meets at the same time as the State Medical Association."—Texas State Journal of Medicine.

Obituary

MISS ANNA MARGARET BARLOW, daughter of Dr. and Mrs. M. J. Barlow, North Little Rock, aged 28, died Tuesday, November 15, 1927. She is survived by her parents, Dr. and Mrs. Barlow; two sisters, Mrs. Samuel Murtishaw of Shreveport, Louisiana, and Mrs. B. H. Guenter of North Little Rock; two brothers, Jack, who is a student at Georgia Tech, and Ralph, a student at Washington University.

Miss Barlow was born October 9, 1899, and at the age of 16 years graduated from the North Little Rock High School. At the age of 19 she graduated with an A. B. degree at Henderson-Brown College. After teaching two years in the public school at Pine Bluff she took special training at the University of Chicago in her chosen work of technician. At the time she became ill she was instructor in bacteriology at the University of Arkansas College of Medicine.

At her request, the Rev. J. M. Workman preached the funeral service. Her pastor, the Rev. A. E. Holloway, pastor of the First Methodist Church of North Little Rock, assisted.

A verse from her favorite hymn is quoted as follows:

"When sinks the soul subdued by toil to slumber,
Its closing eyes look up to Thee in prayer;
Sweet the repose beneath Thy wings o'er shading,
But sweeter still to wait and find Thee there."

HORN, LORENZO D.—L. D. Horn, M. D. of Egypt, died November 18, 1927. Aged 74. Dr. Horn died in a hospital in Jonesboro where he was taken after having his leg broken when a garage door fell on it. Pneumonia developed later, which caused his death. He leaves a wife, Mrs. Cora Lillian Horn.

FINCH, CARL—Carl Finch, M. D., of McCrory, died November 9, 1927. Aged 48. He was a graduate of Vanderbilt University Medical School, Class of 1901. Licensed in Ark-

ansas, 1920. Dr. Finch was formerly located at Bellefonte and Valley Springs, Boone County, but removed to McCrory about two years ago.

He is survived by his wife and one small daughter.

ALLEN, FREDERICK EMERSON—F. E. Allen, M. D., medical officer at the United States Veterans' Hospital Fort Logan H. Roots died in November. Aged 59. He is survived by his wife.

Dr. Allen, who had been a member of the hospital staff since May, 1926, was born in Worcester, Mass., January 20, 1868. He was a graduate of the Physicians and Surgeons College of California. For ten years he served as superintendent of the California State Hospital at Mendocino and served during the World War as a medical officer. He held the rank of lieutenant colonel in the Medical Reserve Corps.

Dr. Allen was a member of the Society of Colonial Wars, the Mayflower Society, and the Arkansas Medical Society.

WITT, BENJAMIN McCRARY, M. D.—Dr. B. M. Witt of Little Rock died December 5, 1927. Aged 49. He is survived by his wife, a daughter, Mary Virginia, his mother, Mrs. J. P. Witt, and two brothers.

County Societies

CRAIGHEAD COUNTY

(Reported by THAD COTHERN, Sec.)

The Craighead County Medical Society met in regular session, December 1, 1927, in Jonesboro. The president and vice-president being absent, Dr. Stroud presided.

Among the out-of-town doctors present were Baird of Marked Tree; Elders of Harrisburg; Harrison of Trumann; Hull of Mammoth Spring; McCurry of Cash; McDaniel and Moreland of Tyronza and Nisbett of Brookland.

The major feature of the scientific program was a paper on "Heredity" by Dr. H. B. Hull of Mammoth Spring. So highly was this paper appreciated that a motion was made and unanimously carried that a copy be sent

to The Journal of the Arkansas Medical Society for publication.

Following Dr. Hull's paper, Dr. Cothorn read a short article appearing in the December issue of Holland's Magazine entitled "the Doctor's Heart," which was along the line of Dr. Hull's paper.

Drs. P. W. Lutterloh, Halton and Jackson were appointed a committee to draw up resolutions regarding their beloved member, Dr. Horn of Egypt, recently deceased.

Drs. Cothorn, Altman, and Jernigan were appointed a committee to review and study the Principles of Medical Ethics as advocated by the American Medical Association and to make recommendations to the society as to their adoption as a part of the by-laws.

The following officers were elected for 1928: President, H. A. Stroud, Jonesboro; First Vice-President, J. W. Elders, Harrisburg; Second Vice-President, L. H. McDaniel, Tyronza; Secretary, P. W. Lutterloh, Jonesboro; Treasurer, H. H. McAdams, Jonesboro; Censor, A. G. Scott, Jonesboro.

The next meeting will be held the first Thursday in January, 1928.

Advance Announcement

TWELFTH ANNUAL CLINICAL SESSION

of the

AMERICAN COLLEGE OF
PHYSICIANS

will be held at

NEW ORLEANS, LOUISIANA

MARCH 5-9, 1928

A post-graduate week on Internal Medicine of exceeding value and interest, devoted to hospital clinics, ward-walks, laboratory demonstrations and addresses by eminent medical authorities.

Qualified physicians and laboratory workers are cordially invited to attend. A nominal registration fee is paid by non-members of The College.

Headquarters: Roosevelt Hotel.

Information: Apply to the Executive Sec't.

Frank Smithies, M. D., President
Chicago, Ill.

John H. Musser, M. D., Chairman
New Orleans, La.

E. R. Loveland, Executive Secretary
The Covington, 37th & Chestnut Streets
Philadelphia, Pa.

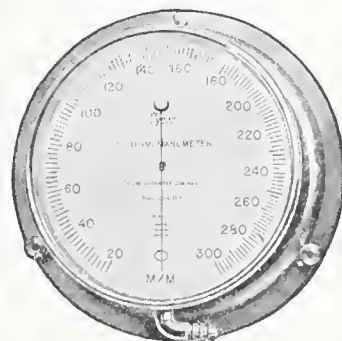


Tycos

FEVER THERMOMETERS

Real merit is found in these Fever Thermometers. Every one bears the name *Tycos*—the mark that tells you you are purchasing a certified thermometer. Insist on *Tycos*. Carried by all leading druggists.

Tycos Office Type SPHYGMOMANOMETERS



Embodies all of the reliability of the pocket type sphygmomanometer, with the added advantages of large, easy reading dial and long index hand. Can be used on desk or attached direct to wall. Six inch silvered dial and heavy case. Standard equipment includes 6 feet of rubber tubing, pneumatic bag and sleeve, inflating bulb and valve. Your dealer can supply you.

For
Your
Library

BLOOD PRESSURE MANUAL.
ANALYSIS OF URINE.
CATALOG OF URINALYSIS
GLASSWARE.

These are free, send for them

Taylor Instrument Companies

ROCHESTER, N. Y., U. S. A.

Canadian Plant, Tycos Building Toronto
Manufacturing Distributors in Great Britain,
Short & Mason, Ltd., London

THERE IS A TYCOS OR TAYLOR TEMPERATURE INSTRUMENT
FOR EVERY PURPOSE

The Secretary of the County Society will please notify the State Secretary immediately of any error or change in these officers.

DIRECTORY

OF THE

COUNTY SOCIETIES OF THE ARKANSAS

MEDICAL SOCIETY

1927

COUNTY	PRESIDENT	ADDRESS	SECRETARY	ADDRESS
ARKANSAS	S. A. Drennen	Stuttgart	J. E. Neighbors	Stuttgart
ASHLEY	L. C. Barnes	Hamburg	J. W. Simpson	Hamburg
BAXTER	J. I. Thompson	Yellville	J. J. Morrow	Cotter
BENTON	W. A. Moore	Rogers	H. J. G. Koobs	Rogers
BOONE	G. I. Jackson	Harrison	D. L. Owens	Harrison
BRADLEY	W. T. Fike	Warren	Rufus Martin	Warren
CALHOUN	C. T. Black	Thornton	T. F. Rhine	Thornton
CARROLL	Henry Pace	Eureka Springs	R. H. Huntington	Eureka Springs
CHICOT	E. Baker	Dermott	B. C. Clark	Lake Village
CLARK	J. P. Bremer	Point Cedar	H. A. Ross	Arkadelphia
CLAY			M. C. Richardson	Datto
CLEBURNE				
CLEVELAND	A. J. Hamilton	Rison	H. O. Wilson	Rison
COLUMBIA	G. F. McLeod	Magnolia	T. H. Jones	Magnolia
CONWAY	A. R. Bradley	Morrilton	W. H. Bruce	Morrilton
CRAIGHEAD	S. W. Moreland	Jonesboro	Thad Cothorn	Jonesboro
CRAWFORD	O. M. Bourland	Van Buren	J. A. Wigley	Mulberry
CRITTENDEN	T. S. Hare	Crawfordsville	L. C. McVay	Marion
CROSS	W. H. McKie	Wynne	Thos. Wilson	Wynne
DALLAS	H. H. Atkinson	Fordyce	J. E. M. Taylor	Sparkman
DESHA	W. H. DeClark	McGehee	W. B. Grayson	McGehee
DREW	M. Y. Pope	Monticello	A. S. J. Collins	Monticello
FAULKNER	T. C. Watson	Mt. Vernon	J. S. Westerfield	Conway
FRANKLIN	E. W. Blackburn	Ozark	Thos. Douglass	Ozark
GARLAND	J. L. Greene	Hot Springs	O. H. King	Hot Springs
GRANT	Robt. L. Paxton	Thiel	Irvin Sheppard	Sheridan
GREENE	E. M. Scott	Paragould	Wm. M. Majors	Paragould
HEMPSTEAD	Don Smith	Hope		
HOT SPRING	E. T. Bramlitt	Malvern	W. G. Hodges	Malvern
HOWARD	J. S. Hopkins	Nashville	D. A. Hutchinson	Nashville
INDEPENDENCE	O. S. Woods	Salem	M. S. Craig	Batesville
JACKSON	A. L. Best	Newport	M. L. Harris	Newport
JEFFERSON	J. T. Palmer	Pine Bluff	J. C. Beard	Pine Bluff
JOHNSON	A. L. Boen	Clarksville	E. H. Hunt	Clarksville
LAFAYETTE	D. C. Nichols	Stamps	F. W. Youmans	Lewisville
LAWRENCE	J. C. Hughes	Hoxie	W. W. Hatcher	Imboden
LEE	O. L. Williamson	Marianna	W. B. Bean	Marianna
LINCOLN	J. M. McClendon	Gould	Chas. W. Dixon	Gould
LITTLE RIVER	J. W. Ringgold	Ashdown	W. E. Vaughan	Richmond
LOGAN			S. P. McConnell	Booneville
LONOKE	J. R. Cuning	Lonoke	Henry Thibault	Scott
MADISON	W. E. Acree	Huntsville	Fred Youngblood	Huntsville
MARION				
MILLER	H. E. Murry	Texarkana	Preston Hunt	Texarkana
MISSISSIPPI	L. D. Massey	Osceola	F. D. Smith	Blytheville
MONROE	L. H. Stout	Brinkley	E. D. McKnight	Brinkley
MONTGOMERY	W. D. Freeman	Mount Ida	J. H. McLean	Caddo Gap
NEVADA	W. W. Rice	Prescott	O. G. Hirst	Prescott
OUACHITA	J. S. Thompson	Stephens	R. B. Robins	Camden
PERRY				
PHILLIPS	J. W. Bean	Marvell	Geo. R. Storm	West Helena
POINSETT				
POLK	C. F. Johnson	Hatfield	F. C. Mullins	Hatfield
POPE	H. S. Drummond	Russellville	Wm. P. Scarlett	Russellville
PRAIRIE	Edward Adams	De Valls Bluff	J. R. Lynn	Hazen
PULASKI	Anderson Watkins	Little Rock	R. J. Calcote	Little Rock
RANDOLPH	R. R. Johnson	Walnut Ridge	L. R. Pace	Pocahontas
SALINE	Dewell Gann, Sr.	Benton	T. E. Buffington	Benton
SCOTT	C. Bevil	Waldron	F. R. Duncan	Waldron
SEARCY	E. W. Wood	Marshall	Sam. G. Daniel	Marshall
SEBASTIAN	J. S. Southard	Fort Smith	C. S. Means	Fort Smith
SEVIER	B. E. Hendrix	Gillham	J. C. Graves	Lockesburg
ST. FRANCIS	A. B. Caldwell	Caldwell	J. O. Rush	Forrest City
UNION	J. M. Sheppard	El Dorado	G. D. Murphy	El Dorado
WASHINGTON	G. McCormick	Prairie Grove	P. L. Hathcock	Fayetteville
WHITE	T. G. Burge	Judsonia	Sam. J. Albright	Searcy
WOODRUFF	J. W. Morris	McCrory	L. E. Biles	Augusta
YELL	H. L. Montgomery	Gravelly	C. B. Linzy	Plainview

THE JOURNAL

OF THE

Arkansas Medical Society

PUBLISHED MONTHLY UNDER THE DIRECTION OF THE COUNCIL

Vol. XXV

LITTLE ROCK, ARK., JANUARY, 1928

No. 8

LEUKEMIA*

J. H. FOWLER, M. D., Harrison

Report of Case

Leukemia is a fatal disease accompanied with a marked increase in the number of leukocytes in the blood. The disease is attended with progressive anemia, internal hemorrhage and cachexia.

A diagnosis of leukemia, to be above criticism, must be substantiated by proof of many points. Two of the most important of these are: (1) an aleukemic or subleukemic stage, (2) a characteristic blood picture of the leukocytes, which shows a variation of all the white cells from the normal.

The subject of blood, I leave largely for the pathologist to discuss, as it is by the differential staining that we are able to classify the different types of leukemia.

Leukemia is usually spoken of as acute, myelogenous, or lymphatic. The first case of acute leukemia was described in 1857, and there were only seven authentic cases in the literature reported up to 1903. This number has been greatly increased during the last twenty-four years. However, the number would not be many if the diagnosis were kept above criticism.

Acute leukemia runs a rapid course, terminating usually in two to four months. To me it resembles sarcoma, and especially does that type called chloroma, in which the clinical symptoms, the blood picture, and the pathological findings are identical with those of acute leukemia. It has been suggested by a recent writer that leukemia is a sarcoma in a liquid medium.

The onset of leukemia is usually insidious, but may come on with a fever accompanying tonsillitis, abscessed teeth, or fractured bone.

Pallor of the skin, anorexia, tinnitus aurium and failing strength are the first symptoms. Later, enlargement of the lymphatic glands, of the spleen, and of the liver and formation of tumors may occur. Near the termination of the disease there is internal hemorrhage from the nostrils, ears, alimentary tract and gums. The gums become swollen and gangrenous; petechiae are present, especially over the arms and legs; the skin is very dry and extremely white; the heart fails to compensate and an unusual murmur develops.

The differential diagnosis of myelogenous leukemia and lymphatic leukemia is not as easy as one might think. We are taught that the myeloid cell is granular and the lymphatic cell is non-granular, but there may be found in the same case both granular and non-granular cells. Thus, you see, the pathologist may not be able to determine with just what type he is dealing. The tendency of thought today, is that many of the myelocytes, although closely resembling lymphocytes, are different morphologically, and do not originate in the lymphatic tissue but from the myeloid tissue.

The more embryonic the cell, the more malignant is the leukemia. It is not the great number of white cells, but the appearance of the myeloid cells in the peripheral blood which is the significant fact in the myelogenous leukemia.

The most constant of the physical findings, and possibly the most important, is the glandular enlargement. This is usually very extensive, and especially in the cervical, axillary, and inguinal glands. Enlargement of the abdominal glands may sometimes be felt. The enlarged lymphatic glands do not show redness and are rarely sensitive to pressure. They do not break down unless having a secondary infection.

At the onset of leukemia, the heart has no physical significance, but as the disease progresses, tachycardia and palpitation are noticed. As the disease nears its termination, a

*Read before the 52nd Annual Meeting of the Arkansas Medical Society, held in Little Rock, May 11, 12, 13, 1927.

systolic murmur may be heard and the increased mitral insufficiency is more and more pronounced until death.

The lungs do not show any symptoms until the last weeks of the disease and then the involvement is probably due to enlarged mediastinal lymph glands and the insufficiency of the heart's action.

The liver sometimes reaches an enormous size, but still retains its smoothness, and no jaundice accompanies the enlargement.

The spleen may be palpated in nearly all cases, extending below the costal margin with its firm edge. It may also reach a very large size.

It is not uncommon to find albumen and casts in the urine. The patient often complains of painful micturition and of having to pass urine often.

Fever is present in the acute type of leukemia, but only to a slight degree.

Now as to the treatment of leukemia, our efforts to successfully combat the disease, up to the present time, have been very unsatisfactory. The etiology of leukemia is yet uncertain, and until this can be ascertained, in all probability our efforts will meet with the same failure that they have met heretofore.

The remedies used that seem to give the best results, are arsenic, benzol, x-ray and radium. While these treatments will reduce the number of white blood cells at first and the general condition of the patient seems to improve, they are only temporary aids and it is yet for the medical profession to find the cause of leukemia and satisfactory treatment.

REPORT OF CASE

A white boy, age 16 years. Family history, negative. Previous health had been good. Rather small for his age, weight, 110 lbs. when he was 16 years, 8 months old. Early in the spring of 1926, he had a front tooth broken which soon abscessed. This was about May 1st, and in June it was removed. No further trouble was noticed at this time. He was very strong and had great endurance, was interested in strenuous sports.

Appetite began failing during the month of July, but to no marked degree. A pallor gradually came on and on September 12, 1926, he complained of a slight pain in the left knee, resembling a sprain. This pain continued to grow worse until it was necessary to give an anodyne for his rest at night. There was no fever at this time and the pulse was normal.

There was no swelling of the knee and no tenderness to pressure. An x-ray picture at this time showed nothing abnormal. He was put to bed and given the salicylates, and the knee seemed to get better. He was allowed to go to school again and soon the knee was paining him as much as before. He suffered more at night. He said the pain wasn't so bad, but that he just couldn't sleep.

In October he was taken to Little Rock for examination. He was first taken to Dr. F. Walter Carruthers, who made a thorough physical examination. The case was then referred to Drs. Rhinehart and Rhinehart for x-ray pictures of the knee, pelvis and teeth, and for a blood examination. Dr. S. F. Hoge was next called upon to make both physical and blood examinations.

The x-ray pictures, to me, did not reveal anything. The red blood cells showed 4,500,000, the white, 48,000. Dr. Hoge's blood examination showed 60,000 white and both granular and non-granular leukocytes were found. The patient was brought home October 9, and taken back to Little Rock October 12, when he was examined again and given x-ray treatments. Exposures were made to the knees, spleen, and thorax. The white blood count was rapidly brought down to normal and the pain was relieved in the knee so that the patient had a good night's rest—the first he had had for some time. The appetite and strength seemed to improve for a while. A physical examination at this time did not reveal anything out of the ordinary—pulse and temperature normal; spleen, liver, and urine normal, and no enlarged glands.

On October 16, the patient returned home and for a while no change was noticed except that he grew more anemic. His appetite was not good, but he continued to eat at regular intervals.

On October 7, a small tumor about the size of the end of the thumb, was first discovered on the head. Patient had not known it was there and gave no history of receiving bump or hurt. The tumor was firm to the touch and no pain from pressure was experienced. His hearing had begun to bother him considerably. He said his ears sounded like the burning of a gas stove and that he could count each heart beat by the pulsation in the ears. His feet and hands were dry and he occasionally became very thirsty. He had a slight rise in temperature and on several occasions, he had profuse sweats at night or when he slept. The

tumor on the head grew to about three inches in diameter, hard, immovable, and no pain on pressure. Eight other tumors appeared on the head, but they were small, ranging from one-half inch to one inch in diameter. A tumor in the left orbit grew until it caused the eye to protrude so the lids could not close over it. This tumor began growing about the time the first tumor on the head was noticed and its growth was also rapid. Another tumor, and one which grew to a large size was on the left upper maxillary and malar, extending from the eye to the gums and pushing the nose considerably to one side. Patient first thought this tumor was a gum boil; said that it was not sore, but hard. Another tumor grew on the place where the front tooth had been removed. Petechiae could be seen on the arms, legs, and body during the last weeks.

The patient was slowly, but surely losing strength. On November 20, it was noticed that the big tumor on the head was growing smaller and by November 28, it had completely disappeared. The tumor behind the eye likewise went away, allowing the eye to go back to its normal place. It had completely disappeared by November 30. At this same time his hearing returned as suddenly as the tumors disappeared. He was able to hear the songs of birds, something that he had been unable to do for several weeks.

On November 22, he had a hemorrhage from the nose. This lasted about two hours. The nostril was plugged and hemostatic serum used. On the next day a second hemorrhage occurred and was stopped in the same manner; but with more difficulty. A slight hemorrhage from the gums was also noticed. The gums were swollen and dark red. On November 25, there was a severe hemorrhage from the gums and also a slight bleeding in the left ear. These hemorrhages continued at frequent intervals until an almost constant hemorrhage occurred during the last few days of his life.

After the hemorrhages began, a systolic murmur was noticed and the heart's insufficiency grew more and more noticeable until death came. Patient was conscious until the last, even after the eyes failed to function. Death came on December 4.

DISCUSSION

DR. F. W. CARRUTHERS, Little Rock: Since this is a case bearing on the subject of sarcoma, I just want to emphasize one or two points. The latest reports published recently in the S. G. O. Journal, taken from the sarcoma registry of the American College of Surgery, calls our particular

attention to the etiology, and that is trauma. All of these acute types of cases presenting a history of trauma should be watched very, very carefully. 82 per cent of all these cases occur in the lower third of the femur, 20 per cent of the other cases in and about the knee, occur below the knee. 52 per cent occur above it. The remainder occur in and about the other regions.

I now have a case in the hospital of a young boy that Dr. Reves sent down to me, who gave a history of injury to the inner aspect of the knee just below the knee-joint, involving the internal condyle. This was eight months ago. He had been seen by a number of men and I think one of them told me that he thought he had a case of sarcoma, but he wasn't sure. After going over the case, at first, I thought he probably had a tubercular condition; but the fact that it never involved any portion of the integrity of the joint itself made me slip tuberculosis immediately to the lower end of my possibilities and to put sarcoma or questionable malignancy in the front because of the particular area and the type of involvement that it was.

Now, in making a diagnosis of these cases, submit them to the x-ray frequently; as soon as possible, get a biopsy of the tumor itself, but you cannot always be sure of biopsy.

I take Dr. Hoge into the operating room with me and have my patient prepared to do an amputation, if it is necessary. If he is at all doubtful about the tumor, I will send my patient back to the room until I am absolutely sure or I am positive that I have a sarcoma or malignant tumor. I certainly would not cut a leg off and then let him tell me two weeks later, after making a careful study, not biopsy, but a careful routine pathological microscopical study that I did not have a true malignant condition. Then I will go back and operate on him according to the findings.

Dr. Bloodgood of Baltimore, called our attention to the fact that we must not rely absolutely upon biopsy and do radical operations. However, the radical operation with amputation early is the only absolute cure.

Up to the present time, there are only seven cases on record that have lived beyond the five-years period and those have been the ones that early amputations have been performed. So be very careful and be very diligent; be sure that you know what you are doing. Adopt the little slogan, we are using out at the hospital that I recently originated:

"Do only the things you know you can do, and not what you think you can."

DR. S. F. HOGE, Little Rock: I think I may well preface my remarks by saying that the life of a pathologist is hard. No judge on any supreme bench makes any more weighty decisions than comes up before the pathologist. The judge's decision may possibly be appealed or set aside. Nature sets aside no decisions within her own domain. When dealing with tumors or certain other diseases, he cannot afford to err. If he makes a mistake and calls a lesion malignant, when it is not, his colleagues will act on his decision and the patient carry a scar for the rest of his life. On the other hand should he decide the tumor is not malignant, when in reality it is, there is no appeal. The treatment will be that outlined for non-malignant tumors and the patient will pay with his life.

The hardest decisions to make are those that follow the study of a specimen under the microscope, where one sees the unmistakable evidence of malignancy. This is like a bolt from the clear

sky and strikes at the very heart of patient and friends.

This is still more difficult when the patient is the son of one's colleague and friend. This was my difficult duty in this case, the pronouncement of a diagnosis of leukemia probably of the myelogenous type. As the condition progressed it became evident that this was not the usual type of leukemia, but that it resembled that particular and yet rare type of chloroma.

Brannon, in Johns Hopkins Bulletin, 1916, summarized the cases on record to that time. Suhndorff, in 1910, reported 73 cases, of which 17 were placed with the myelocyte group and 56 in the lymphoid group. Since the previous report of Suhndorff, Brannon has added 56 more making in all 129. It is hoped that this case may be added making 130.

Much discussion has followed the etiology and classification of these lesions. Opinions still differ except on the one point, and that is, that their cause is not yet known, their classification is not so obscure.

The greenish tinge in such tumors is still unexplained. Various theories have been advanced, such as the presence of eosinophiles, or myeloid cells, or possibly a lipo chrome pigment. None of them are entirely satisfactory.

The clinical course is rather distinctive and to emphasize the different points would be like repeating those named by the essayist. These we know are accurate and everyone mentioned is a dagger dripping with blood, as a father's love as wages a gallant fight in a inevitable game.

As this case is representatively of a rare lesion, consultation was secured. Slides were sent to Dr. Hal Downey of University of Minnesota, as it is our belief that on this line of study, the world knows nor holds a better man. His reply is attached.

FOLIA HAEMATOLOGICA
Office of the American Editor
University of Minnesota
Minneapolis

October 18, 1926.

Dear Dr. Hoge:

There is no doubt but what this case is one of leukemia. The predominating cell is very immature and is of the myeloblastic type. Most of them are very atypical in structure. There are some mature pmn's along with intermediate stages between the myeloblasts and the mature cells. There seem to be enough of these latter forms to justify the diagnosis of "subacute" myelogenous leukemia. This would seem to check fairly well with the clinical features of the case.

It is one of the best cases that I have seen for showing numerous atypical myeloblasts with Auer bodies and abnormal azurophil granulation. I should appreciate it if you could send me some more unstained smears for use in our course in Medical Hematology.

I am sorry to have to make a diagnosis in which the prognosis is so unfavorable. I know of no treatment that will be of any benefit. Transfusions are usually of little value in the acute forms of leukemia and little can be expected from the x-ray.

Yours very truly,
HAL DOWNEY.

REPLACEMENT THERAPY*

J. H. McCURRY, M. D., Cash

Some day some laboratory experimenter will work out a simple and reliable method to determine the abnormal chemistry of the other body fluids as is now known about the urine and a new name will be added to the history of medicine.

"ACIDITY SPELLS DEATH—ALKALINITY LIFE"

Demineralization is a far more frequent condition than we imagine, and often when disease conditions refuse to respond to medication and other therapeutic measures, we will find the solution in the administration of the various salts proportionate in dosage to the needs of the individual metabolism.

In all infections and fevers one of the most constant deviations is demineralization, hyperacidity, acidosis or acidemia resulting.

Physiologists teach us that the defensive properties of all the body fluids, the blood, lymph, serum, etc., including the digestive ferments of phagocytes, can only be exercised efficiently when the alkalinity of these fluids is adequate.

The relationship of the blood's alkalinity to the defensive function of the body has been urged by several experimentors. Some authorities give the blood's alkaline reaction the first place in the immunizing processes of the body, claiming it increases leucocytenesis, and therefore, the number of phagocytes available. Lowey and Rieter noted that the leucocytes increased in number in proportion as the alkalinity became more marked.

Hutchinson states that the considerable increase of alkalinity during ingestion of food is synchronous with the appearance of the alkaline tide in the urine. He explains this alkalinity by the absorption of alkaline factors from the food.

The quantity of these salts eliminated in twenty-four hours is very large. Sajous says: "Over one-half ounce of sodium chloride being eliminated daily with the urine, the sweat, feces, etc., the reduced diet and the anorexia prevents especially during febrile diseases, its being replaced through the normal source, the food."

The body's supply becoming inadequate very soon, the protective functions are ham-

*Read before the 52nd Annual Meeting of the Arkansas Medical Society, held in Little Rock, May 11, 12, 13, 1927.

pered in proportion as the deficiency of the salt is marked. This is a fruitful cause of death in all infections.

This applies as well to the alkaline salts, the elimination of which proceeds at the rate of about 68 grains daily in the urine alone. Gradually as their proportion in the blood becomes reduced, both the nutrition of the body and the activity of the defensive process plastic and cellular, are correspondingly inhibited, irrespective of remedies administered. Sajous also states that sodium chloride though a neutral salt, is a most important inorganic constituent of the body fluids. Owing to the smallness of its molecules and its chemical inertia, it is preeminently the salt which maintains the osmotic equilibrium between the tissues and the blood. When the supply is inadequate, all the functions are hampered, since it is the solvent of adrenoxidase. By holding the latter in solution it insures its free circulation as a constituent of the plasma in all vessels down to the minutest capillary networks distributed to cellular elements, including those of the nervous system. This also enables the adrenoxidase-laden plasma to transude freely through the capillary walls in order to reach the tissue cells; *i. e.*, to carry on the life process. The free osmotic properties which the lymph in the tissue spaces owes to sodium chloride insures another important function; viz., that of sweeping away by the lymph-current of all waste derived from the cell.

A review of the above physiological facts make it quite evident that we should begin at an early date, in fact at the incipency of all infections and febrile diseases to replace these deficiencies.

Fortunately in milk we have a food rich in these salts, and the early administration of liberal quantities will be a material help to accomplish this result. With patients seen early we can supply the deficiency by adding these salts to the food and beverages. When the salts cannot for any reason be administered by the mouth entirely they should be given by enema, or if necessary subcutaneously or endovenously.

Some of the chemical firms supply some very elegant and efficient preparations. Upjohn's Citrocarbonate is classical, or we can get a tablet containing magnesium and calcium phosphate, calcium glycerophosphate and potassium bicarbonate, sodium bicarbonate. The above with the addition of sodium

chloride contains the mineral salts present in the blood that should generally be added or supplied in diseases that deplete or rob the blood of its alkaline mineral reserve.

The hormone glands, their secretions and extracts, are rapidly receiving increased attention from many able investigators, and are giving such definite and reliable results therapeutically that their worth is universally accepted.

The increased knowledge derived through the study of these glands prove conclusively that natural defense and immunity is supplied and acquired through them. And the therapist who fails to consider the hormones both as therapeutic agents to combat disease and the part they assume in producing the physiological effects of the inorganic remedies cannot treat disease conditions successfully or intelligently.

It is now known that what benefit is derived from the inorganic alteratives and stimulants as iodine, mercury and arsenic, strychnine and digitalis are secured either by stimulating or sedating these glands; especially the test organ or adreno-thyroid center located in the post-pituitary.

IODINE

As proof of the above assertion I will offer the following evidence: "If from any cause, however, the food fails to supply enough iodine to satisfy the needs of the thyroid apparatus, therapeutic doses of this halogen prove beneficial through this apparatus, by enabling it to restore to the blood what proportion of thyroidase it may be lacking. The main therapeutic action of iodine and its preparations, however, is of another kind. It is due to the direct action of the iodine compound (secreted by the leucocytes which have failed to be admitted in the thyroid) upon the test-organ and stimulation of the latter. As this causes over-activity of the adrenals and a corresponding increase of adrenoxidase in the blood, general metabolism becomes more active. As a result nutrition is improved, the processes of repair are hastened, and the bacteriolytic and anti-toxic powers of the blood are greatly enhanced."

MERCURY

"The various salts of mercury owe their therapeutic value to the energy with which they stimulate the test-organ. In minute doses they promote nutrition, that is, act as

tonic, because by stimulating the test-organ, they increase the secretory activity of the adrenals, and enhance, therefore, general oxygenation and metabolism. The function of the pancreas, the thyro-parathyroid apparatus and leucocytogenic organs being correspondingly activated, the quantity of autoantitoxin in the blood is augmented. The immunizing process is most active in the liver, an action which becomes manifest when sufficiently large doses of mercury to produce purgation are given. Mercurial purgatives do not, as generally believed, produce their effect by increasing the secretion of bile, which is a mere epiphenomenon when it occurs, but by increasing the germ and poison destroying properties of the hepatic blood. The green stools produced are rich in biliverdin; *i. e.* adrenoxidase.

"The antitoxic process carried on in the liver under the influence of a mercurial purgative is supplemented by a similar process in the intestine. The excess of adrenoxidase in the blood raises the secretory activity, not only of the pancreas, but also of all of the intestinal glands. A large volume of intestinal juice rich in pancreatic juice, nucleo-proteid and adrenoxidase; *i. e.*, auto-antitoxin similar to that in the blood, is thus produced, which flushes the intestinal canal and sterilizes it. The powerful stimulating action of mercury on the test-organ; *i. e.*, on the adrenal center renders it a powerful cardiac stimulant. The adrenal secretions not only sustains the functional activity of the right heart, but the improved oxygenation of the entire body increases the nutrition of the organ. Again by stimulating catabolism, it also relieves the blood of an excess of waste," and thus antagonizes undue arterial tension and vascular resistance.

ARSENIC

"Nature seems to have provided a substance, arsenic, which, merged in with the thyroidase probably, tends to reduce markedly the sensitiveness of the test-organ and adrenal center. Whether we are dealing with a physiological constituent of the body or not the fact remains, that it is found normally in greatest quantity in the thyroid gland and that it antagonizes directly the action of thyroid extract. Whereas, the latter promotes catabolism and emaciation, arsenic prevents wear and tear of the tissue-cells. Thyroid breaks down fats, arsenic conserves them. According to several endocrinologists it is direct

and probably the physiological antagonist of thyroidase as far as the stimulating influence of the latter on the test-organ is concerned. By depressing, through this organ, the functional activity of the adrenal center, it restrains the production of adrenal secretion and, therefore, the formation of adrenoxidase. This reduces general oxygenation correspondingly."

The physiological action of thyroidase being to enhance catabolism both by stimulating the test-organ and adrenal center, as antagonist of thyroidase, opposes catabolism; *i. e.*, a too rapid consumption of cellular elements. While, therefore, thyroid extract in sufficient doses causes emaciation, as shown by its action in obesity, arsenic provokes the opposite effect, a gain in flesh.

It may seem that I have digressed, but iodine can well be considered a replacement remedy since authorities state that the study of the thyroid begins and ends with iodine.

THYROID

Thyroid replacement is indicated in many acute and chronic asthenic conditions and dystrophic disturbances.

Without any question the thyroid elaborates a secretion that is indispensable for normal growth and development of the body. It is a most wonderful organ and has been very aptly termed "the keystone of the endocrine arch," because it is involved directly or indirectly in the work of most all of the hormone glands.

Many different physiological manifestations are intimately bound up with the work of the thyroid. Sajous says when we administer thyroid gland which combines the action of the thyroid and parathyroid, the following effects are produced. It renders the phosphorus of all tissues and all free substances such as bacteria, waste, toxins, etc., containing phosphorus, more inflammable or sensitive to the oxygen in the blood. As this applies particularly to nerves and nerve centers (all of which are especially rich in phosphorus) the adrenal center and therefore the adrenals themselves are excited, and the adrenal secretion being the agent which takes up the oxygen of the air to sustain the bloods oxygenizing power, the supply of oxygen is also increased. All the various phosphorus laden substances are thus not only rendered more readily oxidizable by thyroid extract, but this remedy also provides indirectly the required oxygen. This is not all however, as the functions of all organs are

enhanced by this process, the pancreas and the leucocytogenic organs are also stimulated, and trypsin and phagocytes, which are the active destroyers of pathogenic organisms, toxins and other poisons, are also increased. Briefly, under the influence of thyroid preparations, we have in the blood, and demonstrable therein, all the active agents concerned with metabolism, nutrition and immunity; an increase (1) of adrenal oxidizing substance, or adrenoxidase (the albuminous constituent of hemoglobin; Ehrlich's Amboceptor), (2) of thyroid sensitizing substance (Wright's Opsonin); (3) of trypsin (Ehrlich's Complement and Metchnikoff's Cytase); and (4) Baeteriolytic leucocytes (Metchnikoff's Phagocytes).

"Thyroid therapy has proved most gratifying to me in what few cases of simple goiter and cretinism I have treated. It has been very comforting to me to witness the disappearance of a large goiter under thyroid replacement. There is also a pleasant surprise awaiting any one who will supply the proper and indicated endocrine treatment in cretinism, thyroid, pituitary and thymus being indicated.

"In speaking of atrophy of the thyroid as occurs in cretinism, Carnrick voiced his conclusions in the following words: Here growth fails almost completely, ossification fails, mental growth fails to take place and the whole process of growth and development comes to a standstill. These results are also produced in animal experimentation. The result of thyroid feeding and the administration of thyroid derivatives to such cases is one of the most astounding in medicine. Growth is accelerated, the mental development proceeds, and, if instituted early the development and growth of the organism may proceed approximately along normal lines."

In neurasthenia, rundown conditions, neurones, menstrual and climacteric disorders, hypotension and suboxidation my favorite prescription is Carnrick's Hormotone, a combination of hormones from thyroid, pituitary, suprarenal and gonads.

TETANY

"Tetany according to Sajous definition, is a disorder characterized by painful tonic spasms, is caused by waste products which, by provoking a marked rise of blood-pressure, cause capillary hyperemia and hyperexcitability of all organs, including the spinal and peripheral nervous systems. A spasm occurs when this general excitability is suddenly in-

creased by the appearance in the blood of an excess of auto-antitoxin, the result in turn, of a defensive reaction of the adrenal system, and last until the spasmogenic poisons have been more or less converted into harmless eliminable end products. The spasms of tetany are, to a certain extent therefore, an expression of auto-protective activity. They occur partly because the augmentation of auto-antitoxin, which is the body's main safeguard in all diseases and the active agent in all febrile processes, happen to coincide with a condition of marked irritability of the central nervous system."

I have a five year old child in my care that I have treated for the past three years. The previous history of tetanic spasms dated back to infancy; that is, she would be free from the spasms so long as all went well; but as often as she would have the least disturbance, as a common cold, she would develop twitching of the muscles of the face and contractions or jerking of arm and leg. This went from bad to worse until finally she became so extremely nervous that a visit from the most intimate neighbor would precipitate a paroxysm. I had given tonics of Fowler's and iron, cod-liver oil, antispasmodics and had her mother look well to elimination of bowel and skin. Finally remembering that extirpation of the parathyroids is followed by convulsive phenomena I began feeding dessicated parathyroids 1.10 grs. night and morning. She has been taking this endocrine one year with steady improvement. If she suffers a relapse I contemplate the administration of calcium chloride, with pituitary, thyroid and thymus.

ADRENALIN

Adrenalin preparations according to endocrinologists play a very important role in the body's economy. Sajous says, adrenalin secretions take up the oxygen in the pulmonary alveoli and carries this gas to the tissues as constituent of the hemoglobin. It is the adrenalin secretion which, after absorbing oxygen from the pulmonary air and being taken up by the red corpuscles supplies the whole organism, including the blood, with its oxygen. It is as such, the oxidizing constituent of the hemoglobin, which, in turn, sustains tissue oxidation and metabolism. By enhancing the catalytic and oxygenizing properties of the blood and therefore tissue metabolism, adrenal extractives provoke directly effects that are produced indirectly through the adrenals,

by drugs or poisons capable of stimulating the test-organ. The functional activity of all organs, including the leucocytogenic structures and the pancreas, being enhanced, the blood is provided with an increase of phagocytes and plastic auto-antitoxin.

General indications of adrenalin replacement, Addison's disease to compensate for the deficiency, to stimulate oxidation and metabolism and increase nutrition.

Surgical heart failure, collapse from hemorrhage, asphyxia and submersion. As a catalyzer and constituent of the hemoglobin, promotes energetically the intake of oxygen and its utilization by the tissue cells, including the muscular elements of the cardiovascular system, and thus causes them to resume their vital activity.

The toxemias, including bacterial infections, surgical septicemias, when collapse threatens, especially when a persistently low blood-pressure hypothermia and cyanosis are present. Besides enhancing pulmonary and tissue respiration, the adrenal principal, administered in the same way, enhances the efficiency of the immunizing process.

Capillary hemorrhage from the pharyngeal, esophageal, gastric or intestinal mucus membrane. The mastication of tablets of adrenal substance, the oral use of powdered adrenal substance in 5 grain doses, arrest the flow by causing active metabolism in the muscular elements of the mucosa and constriction of these vessels.

Asthma. Adrenalin is invaluable in the symptomatic treatment of bronchial asthma, by augmenting the pulmonary and tissue intake of oxygen and the cardio-vascular propulsion of arterial blood it arrests the paroxysms; by relaxing the tense bronchial muscles and by preventing the contraction of bronchial muscles from taking place.

Urticaria is sometimes relieved as if by magic with 5 to 10 minims of adrenalin 1 to 1,000 hypodermically. Same treatment is praised for serum sickness.

Epinephrin is included in most local anesthetics. By constricting the capillaries of the area, it delays the absorption of the drug and permits a longer duration of the effect.

Adrenalin contraindications. High blood-pressure, myocardial disease, cardiac dilatation, aneurysm and arteriosclerosis.

IRON

There is so much more that could be compiled under replacement therapy that it would be an imposition for me to subject you to a further tirade. Suffice it to say, that we cannot live without iron. Iron plays an important part in the physiological life of man. It is the most important element in the red blood cells. Without it they could not function. It constitutes about one-third of one per cent of hemoglobin, and gives color to the blood. Without it all the functions of living tissue would cease and death would result. In all grades of exhaustion we find a deficiency of iron. In typhoid, pneumonia, scarlet fever, diphtheria, tonsillitis, laryngitis. In all cases of anemia, simple or pernicious, iron is indicated as one of the needed remedies.

CALCIUM

Calcium starvation is associated with many morbid conditions, as joint troubles, rickets, epilepsy, tetany, in eclampsia and pregnancy, etc.

THE ENDOCRINE GLANDS

The endocrine glands are the regulators of the physiology of the body. They work as a unit and if there is a disturbance of one gland, there is more than likely to be a disturbance of another.

In pituitary replacement we have a shining example. Hypopituitarism causes underdevelopment and hyperpituitarism causes overdevelopment. While in ovarian replacement we have much in little, it is said, that every woman around forty years should take ovarian extract or corpus luteum. This is also often indispensable in artificial menopause, sterility, infantile generative organs, habitual abortion, menstrual disorders and hyperemesis of pregnancy. Elliott has reported the cases of a married woman of 27 years, masculine of figure, with uterus of walnut size and ovaries impalpable, menstrual show only three or four times during life, epistaxis, and sexual feeling almost absent, in which corpus luteum therapy, coupled with uterine massage, was followed by a partial return of menstruation and pregnancy. Dannruther found the drug of similar value in two cases of repeated abortion of obscure origin. In the hyperemesis of pregnancy corpus luteum has been employed by a number of observers with variable, but often distinctly favorable results.

Last but by no means least is insulin. It has been called a staff to lean upon in diabetes. It is also said, that the patient who refuses insulin because of the cost does not properly evaluate the investment and the physician who for any reason does not accept insulin therapy denies his patient the benefits which are justly his.

Not only has the study and use of these organic structures given better and often more effective means to combat disease, but has unraveled several riddles of physiology, pathology and etiology. The knowledge thus gained has vastly added to a clearer and more intelligent application of our inorganic remedies.

A FINAL REPORT OF A CASE OF ASCITES TREATED SURGICALLY*

By R. C. DORR, M. D., F. A. C. S., Batesville

Mrs. J. H. Marehant of Calico Rock, came to the Sanitarium for treatment, February 6, 1926, and gave the following history:

Father and mother living and in good health. Family history negative so far as hereditary diseases are concerned.

In May, 1923, she began to feel a weakness, which gradually grew worse, without pain or fever, however. After two years she began having pain on the right side at the crest of the ilium, with a fullness in her stomach and went to bed.

When she came to our Sanitarium February 6, 1926, she had an awfully distended abdomen was emaciated, with great loss of weight and had been in bed nine months.

On February 9, I operated upon her thinking perhaps she had an ovarian cyst that had caused the distention. In this I was mistaken; it was just ascites, which I believed was due to cirrhosis of the liver. The peritoneal cavity was free of adhesions and smooth.

I had a case just like it two years before, which I treated according to the authorities, but she finally died. I reflected a little while to see what was best to do. The abdominal wall

was just about one-fourth of an inch thick. I finally decided to do the following:

I opened the abdomen at the median line, from the umbilicus to the pubes, then dissected the peritoneum loose from the wall, down to the brim of the pelvis, over to the spinal column, on both sides. Then with my hand, I separated the parietal peritoneum, above the umbilicus on both sides. Also the visceral layer around the vessels of the spleen and liver, which I loosened as much as I could with my hand, without injury to the vessels or liver.

I left the peritoneum attached to the umbilicus. In closing up the lower abdomen, I stitched the peritoneum together, and the remainder of wall of abdomen was closed by itself. I did not drain. The wall collapsed and she had no muscular contractions for ten days.

On the 15th day she got in a car and rode home sixty-five miles up in the mountains. She had no bad symptoms after the operation.

I went to see her at her home five months after the operation. She had gained flesh and was doing her house work, looked well and hasn't any dropsy anywhere.

As she has now been well for more than a year, I have a right to believe she is cured.

DISCUSSION

DR. A. S. BUCHANAN, Prescott: I am glad to have the opportunity to hear this follow-up report of Dr. Dorr's patient because I heard the original paper of this interesting case.

Interesting in that the patient recovered, and is well now, and especially interesting to me in that all of the few cases upon whom I have operated have eventually died. It shows the versatility and originality of the doctor in continuing the operation to a successful end after finding that he had made a mistake in his primary diagnosis of ovarian cyst. I remember operating a case last year with this same diagnosis, and found that a very similar condition existed; but I only put in a drain and the wound eventually healed. The patient went on to a fatal termination.

The way in which he did the operation and the ultimate outcome of the case leads me to agree with Dr. Dorr perfectly as to his final diagnosis.

It sounds very logical that in releasing the larger blood vessels to and from the liver and spleen was the thing that did the good in this case.

I want to thank Dr. Dorr for reporting this case and for giving us the follow-up record as he has.

DR. DORR, in response: I haven't anything to say, only I believe loosening up the peritoneum that way, cutting the nerves and some of the blood supply off is perhaps what kept it from forming, as well as loosening up around the liver. I don't know whether that was true or not.

*Read before the 52nd Annual Meeting of the Arkansas Medical Society, held in Little Rock, May 11, 12, 13, 1927.

THE JOURNAL

OF THE

ARKANSAS MEDICAL SOCIETY

Owned by the Arkansas Medical Society and Published
under the direction of the Council.

WILLIAM R. BATHURST, Editor
810-812 Boyle Building, Little Rock, Arkansas.

Published Monthly. Subscription \$3.00 per year; single
copies 25 cents.

Entered as sccond-class matter, June 21, 1906, at the
postoffice at Little Rock, Arkansas, under the Act of
Congress of March 3, 1879.

Acceptance for mailing at special rate of postage pro-
vided for in Section 1103, Act of October 3, 1917, autho-
rized August 1, 1918.

The advertising policy of this Journal is governed by
the rules of the Council on Pharmacy and Chemistry of
the American Medical Association.

All communications of this Journal must be made to it
exclusively. Communications and items of general inter-
est to the profession are invited from all over the State.
Notice of deaths, removals from the state, changes of
location, etc., are requested.

OFFICERS OF THE ARKANSAS MEDICAL SOCIETY

HENRY THIBAUT, President.....	Scott
R. H. T. MANN, President-Elect.....	Texarkana
HOMER SCOTT, First Vice-President.....	Little Rock
J. B. WHARTON, Second Vice-President.....	El Dorado
O. J. T. JOHNSTON, Third Vice-President.....	Batesville
R. J. CALCOTE, Treasurer.....	Little Rock
Wm. R. BATHURST, Secretary.....	Little Rock

COUNCILORS

First District—W. W. VERSER.....	Harrisburg
Second District—J. L. JONES.....	Searcy
Third District—M. C. JOHN.....	Stuttgart
Fourth District—W. T. LOWE.....	Pine Bluff
Fifth District—L. L. PURIFOY.....	El Dorado
Sixth District—B. C. MIDDLETON.....	Texarkana
Seventh District—DEWELL GANN, SR.....	Benton
Eighth District—ANDERSON WATKINS.....	Little Rock
Ninth District—SAM G. DANIEL.....	Marshall
Tenth District—THOMAS DOUGLASS.....	Ozark

COMMITTEES

SCIENTIFIC PROGRAM—R. J. Calcote, Little Rock,
chairman; A. D. Cathey, El Dorado; O. A. Carruth, Little
Rock.

SCIENTIFIC EXHIBIT—Chas. E. Oates, Little Rock,
chairman; O. C. Melson, Little Rock; M. V. Russell, El
Dorado.

STUDENT LOAN FUND—E. F. Ellis, Fayetteville, chair-
man; Henry Thibault, Scott; Wm. R. Bathurst, Little Rock.

NECROLOGY—F. A. Corn, Lonoke, chairman; M. C. John,
Stuttgart; Geo. B. Fletcher, Hot Springs.

MEDICAL LEGISLATION—Frank Vinsonhaler, Little
Rock, chairman; M. D. Ogden, Little Rock; A. C. Watson,
England.

HEALTH AND PUBLIC INSTRUCTION—John R. Dib-
rell, Little Rock, chairman; Anderson Watkins, Little Rock;
E. L. Watson, Newport.

CANCER CONTROL—A. M. Zell, Little Rock, chairman;
A. A. Gilbert, Fayetteville; W. E. Stallings, Newport.

INFANT WELFARE—Clinton A. Rice, Rogers, chairman;
A. C. Kirby, Little Rock; H. A. Ross, Arkadelphia.

HOSPITALS—W. G. Eberle, Fort Smith, chairman; J. A.
Foltz, Fort Smith; J. W. Butts, Helena.

Editorials

MINUTES

Of Mid-Winter Session of the Council
Held at Little Rock, Thursday,
December 15, 1927

Called to order at 1:00 p. m. President
Thibault in the chair. Present: Councilors,
Gann, John, Verser, Douglass, Middleton,
President Thibault, President-Elect Mann,
Chairmen, Calcote, Dibrell, Vinsonhaler, Zell
and Secretary Bathurst.

The Chairman stated that the object of the
meeting was to devise plans for the work of
the coming year, and invited suggestions and
constructive criticism.

After some discussion of the dates for the
annual session to be held at El Dorado, it was
decided that Tuesday, Wednesday and Thurs-
day, May 1-3 would be the most suitable, all
things considered. The Secretary was in-
structed to ascertain if this time would be
agreeable to the Union County Medical So-
ciety.

Chairman Calcote outlined plans for the
scientific program and some features of the
tentative schedule were discussed.

Chairman Vinsonhaler gave a resume of
proposed medical legislation and discussed
plans for eliciting the support of both the
profession and the laity for the enactment of
reform measures, especially with reference to
minimum educational requirements for en-
trance into a medical school. He also empha-
sized some plans of improved teaching facil-
ities at the medical school, especially the es-
tablishment of a State Charity Hospital.

Dr. Mann referred to the necessity for the
hearty co-operation of the laity, as well as
the profession, in securing remedial legisla-
tion. The matter of a State Charity Hospital
should be stressed in every county so that the
public mind should be thoroughly prepared
for effective work. Dr. Mann offered a num-
ber of constructive suggestions for a thorough
canvass of the situation and meeting the prob-
lems confronting us, and believed success
awaited earnest effort.

Chairman Thibault supplemented Dr.
Mann's remarks with further suggestions, and
said he felt assured that the medical profes-
sion would receive fair treatment at the hands
of the next General Assembly, if proper effort
were made to inform our legislators as to the

urgent need, and convince them of our sincerity of purpose.

Dr. Bathurst reported that at a recent meeting of the State Secretaries, held in Chicago, the composite board was discussed and it was the opinion of the majority of these local officers that its working was not ideal. He thought a basic science law would solve the problem satisfactorily.

Dr. John Dibrell called attention to the fact that we have several standing committees handling kindred subjects. He suggested that it might be feasible to consolidate the committee on Health and Public Instruction, Cancer Control and Infant Welfare, thus preventing duplication of work and facilitating effective progress. He believed the larger committee would function more satisfactorily, the work being largely educational.

Dr. Bathurst: It seems to me the public health affairs might be delegated to one committee. If the chairman believes he can include this reform in his report to the incoming president, he may see fit to use his discretion in the appointment of these committees.

The Chair: My personal opinion is that any new arrangement should be tried out, and if it is a success, then it may be made permanent.

Secretary: At our last Council meeting a communication from Dr. R. L. Fraser, of McCrory, was referred to Dr. Thibault, as a committee of one to investigate with power to act.

Dr. Thibault: Dr. R. L. Fraser, of McCrory, seems to be sponsor for the Health Education Society of America. We are asked not only to endorse this society, but to receive its membership into the Arkansas Medical Society. They propose to release a long line of ethical remedies to organized medicine. I believe the Arkansas Medical Society should have nothing to do with it. (Reads report).

Dr. William R. Bathurst,
Sec., Ark. Medical Society, Little Rock.

Dear Doctor Bathurst:

At the last meeting of the Arkansas Medical Society at Little Rock the Council referred to me, with power to act, a proposal of the "Health Education Society of America," for the Arkansas Medical Society to take over and indorse the policies of the said "Health Education Society." I have investigated this organization, have been visited and lectured by their representative, Dr. Bates and have reached the following decision which I stated

clearly to Dr. Bates as the final disposal of the matter so far as the Arkansas Medical Society and its component County Medical Societies are concerned:

1. The Arkansas Medical Society does not receive organizations as members; nor does it blindly indorse the course of action of any organization. Its members are selected as individuals whose character and conduct are vouched for by the component County Medical Societies.

2. Such an organization as the Health Education Society of America is useless and superfluous, as none of the laudable objects for which it claims to strive are in any way new or of such a nature that they could not be more efficiently and more decorously accomplished through the recognized channels of organized medicine, County, State and National.

3. The idea of using an emblem, slogan or creed on the letter heads, labels and stationery of individual practitioners of medicine, as advocated by this society, is, and should continue to be distasteful, to all reputable physicians and is certainly not compatible with the ideas of decorum and dignity that have so long been held by the Arkansas Medical Society.

4. Their proposal to label with their emblem and their stamp of approval certain remedies and formulae "that have been found ethical and good in saving life and combating disease" is the usurpation of a function now most efficiently performed by the Council on Pharmacy and Chemistry of the American Medical Association and the Committee on Revision of the U. S. Pharmacopeia. The delegation of this function, even in any small degree, to other and unknown hands would be an exceedingly dangerous thing to do.

5. I recommend that all reputable physicians who feel a burning desire to "Educate the public in all matters of Health" exercise their efforts in their daily intercourse with their patients, in their loyal activities in their County Medical Societies, in their State Medical Society and by co-operating, by letter or otherwise with the "Propaganda for Reform" department of the A. M. A. and the Council on Pharmacy and Chemistry. Men who do their whole duty along these lines will have little time for new and strange organizations of unknown origin and hazy aims.

6. The Arkansas Medical Society reserves the right to commend the good and to criticise

the bad in all things pertaining to medicine, health and medical education. It considers this right to judge for itself and express its opinion one of its most important functions and cannot now or at any other time sacrifice this function by blindly indorsing any organization.

7. On the letter heads and on the outside of the envelopes used by the individual members of this "Health Education Society," appears an emblem by the side of which is this inscription: "*The Health Education Society requests your consideration of the user of this emblem; it means that the user has obligated himself particularly to save human lives.*" This implies by inference that all other practitioners may be either engaged in the destruction of human life and if not, they are not "particularly" interested in saving it. It will be hard to convince all the members of the Arkansas Medical Society that the life saving function of the physician has just recently been discovered (in the last two years) and then only "particularly" by the members of the "Health Education Society."

8. I am strongly opposed to our Journal running any matter, either in its body or advertising pages, in advocacy of this organization and advise that we keep entirely away from it.

Please give this report space in the Journal as part of the proceedings of the last meeting of the Arkansas Medical Society.

Respectfully submitted,

Henry Thibault, M. D., Committee.

On motion, report of committee was approved and confirmed.

Dr. Bathurst submitted form of advertisement offered by the "Health Education Clinic" for insertion in the JOURNAL of the Arkansas Medical Society, and requested a ruling as to its ethical aspect.

Chairman: The sense of the Council is that professional cards should contain the name or names, the address, the specialty practiced, without any emblem or device.

On motion of Dr. Douglass, seconded by Dr. John, the Secretary was instructed to advise this party that the objectionable portion of his proposed advertisement must be eliminated before it could be accepted for publication in the JOURNAL.

Dr. Zell discussed some phases of the problems to be met in cancer control and stressed

the importance of early diagnosis and unceasing vigilance on the part of the general practitioner who sees the patients first.

The Secretary read the following communication:

December 7, 1927.

Dr. Wm. R. Bathurst, Secretary,
Arkansas Medical Society,

Dear Doctor Bathurst: The Medical Society of the District of Columbia is going to present to the coming Congress a Medical Practice Act, the provisions of which would preclude any ill-informed cultist from practicing the healing art in the District of Columbia. You may be aware of the fact that the Chiropractors at the last Congress succeeded in getting legislation through the House of Representatives which provides for a separate Chiropractic Board and what is of more importance would carry official recognition to this form of cultism by the Congress of the United States. The Bill was not acted upon in the Senate.

I have been instructed by the Executive Committee of our Society to enclose a copy of a set of resolutions that have been drawn up by the Medical Society of Delaware and adopted by their House of Delegates which we, of course appreciate very much and thought it might offer a possible guide to you for similar action. Later doubtless through Dr. W. C. Woodward's office, you will obtain more detailed information concerning the Medical Practice Act to be introduced. You will be given the number and title of the proposed Bill so that concerted effort may be made through your Representatives in Congress to obtain its adoption as a law for the District of Columbia.

With kindest personal regards, I am,

Very truly yours,

C. B. Conklin, M. D., Secretary,
The Medical Society of the
District of Columbia.

Following the reading of the above communication the Secretary introduced the following resolution, which was adopted:

Whereas, the Medical Society of the District of Columbia is seeking the enactment by the Congress of the United States of a comprehensive medical practice act which provides

for treatment of ailments of the human body ; and

Whereas, The physicians residing within the District of Columbia are disfranchised and deprived of representation in either the Senate or the House of Representatives, being denied the privilege of ballot, the right accorded every citizen of the United States excepting those residing within the District of Columbia ; and,

Whereas, The City of Washington, because of its inadequacy, has become the mecca for cultists and irregulars of every description, as well as the diploma mills of the lowest type ; be it

Resolved, That at this Mid-Winter Session of the Council of the Arkansas Medical Society we advocate this proposed enactment and support the District of Columbia Society in securing this much needed legislation.

On motion the Secretary was authorized to pay the incidental expenses incurred in holding the mid-winter session of the Council. Adjourned.

DR. IRWIN'S NEW MAGAZINE

"The Arkansas Doctor" is the title of a new venture in medical journalism in Arkansas. It is a monthly magazine, edited and owned by Dr. Emmett E. Irwin at Pottsville, member of the Pope County Medical Society. As Editor of the Journal of the Arkansas Medical Society we can scarcely be expected to give utterance to the well known aphorism that "it fills a long felt want." Quite naturally we incline to the belief that the Journal pretty well covers the field of Arkansas, going as it does to every member of the Arkansas Medical Society. Nevertheless, co-operation along ethical lines is welcome and we may sincerely wish the new venture well.

A word of advice, however, from a veteran in the field to a beginner may be taken in the spirit in which it is tendered. Much care is necessary in order to maintain the standards of the better medical journals, to closely watch both reading matter offered or selected for re-

print, and the advertising copy. Many journals refuse to accept advertising that has not been approved by the Council of Pharmacy and Chemistry of the American Medical Association. That is an absolutely safe guide and if any doubt exists the editor should submit the matter to that authority and be guided by the verdict. Nothing will so quickly destroy a medical journal's influence as to publish either papers, news, or advertisements subject to scrutiny and adverse criticism from the high standards of ethics adopted by the leading medical authorities of the country. Just as an example of how carefully copy should be read, note the advertisement of a hospital which promises "Sufficient radium for any use." Why not also promise sufficient castor oil or quinine for any use?

Abstract

COUNTY HEALTH WORK

Charles O'H. Laughinghouse, Raleigh, N. C. (Journal A. M. A., Dec. 24, 1927), suggests that medical education should devise ways and means to prepare physicians in the future to practice the specialty of public health more capably. The office nurse for the rural physician should be popularized. Boards of health could add nothing to their present plan of prevention of disease which would show more immediate and more satisfactory results than the institution of training schools for nurses whose specialty would be to give assistance to the physicians in rural districts who are practicing general medicine. Extension courses by medical colleges for the purpose of bringing special training to the very doors of the rural physicians themselves in isolated communities would prove of untold benefit in the development of county health work. Lectures and clinics by itinerant teachers in the small towns and country communities to which the local profession could be invited and in which the early diagnosis and prevention of disease could be taught and stressed would mean much to the furtherance of county health work and to the attractiveness and safety of rural life.

Personal and News Items

Dr. Albert H. Mann, son of Dr. and Mrs. R. H. T. Mann of Texarkana, having completed his internship in Peter Bent Brigham Hospital at Boston has gone to Vienna, where he will take a special course of instruction in diseases of the eye, ear, nose and throat. Upon his return he will be associated with his father.

At the regular meeting of the Faulkner County Medical Society, held December 15, the following officers were elected for 1928: President, Robert L. Dawson, Wooster; Vice-President, Marcus T. Smith, Conway; Secretary-Treasurer, Joseph S. Westerfield, Conway; Delegate to the State Meeting, Joseph H. Downs, Vilonia; Alternate, Thos. C. Watson, Mt. Vernon.

WANTED—Salaried appointments for Class A physicians in all branches of the medical profession. Let us put you in touch with the best man for your opening. Our nation-wide connections enable us to give superior service. Aznoe's National Physicians' Exchange, 30 North Michigan, Chicago. Established 1896. Member the Chicago Association of Commerce.—(Adv).

The following officers were elected by the Sebastian County Medical Society for the year 1928:

President, D. W. Goldstein, Fort Smith; Vice-President, C. S. Means, Fort Smith; Secretary, C. S. Bungart, Fort Smith; Treasurer, W. R. Brooksher, Fort Smith; Member of Board of Censors, J. H. Buckley, Fort Smith. A report of their annual dinner meeting will appear next month.

In this issue appears a two page colored insert of Lister Bros., Inc., of New York City. For the convenience of readers, a list of their distributors in the field covered by this Journal is herewith given:

Wade's Pharmacy, Amity; Palace Drug Store, Clarksville; The Palace Drug Store, Des Arc; Benning-Condrey Drug Co., Fort Smith; Vegetarian Cafeteria, Hot Springs; McClerkin's Drug Store and Snodgrass & Bracy, Druggists, Little Rock; Osborne Planting Co. and Willis Market, Marianna; Central Pharmacy, Pine Bluff; Palace Drug Co., Pochontas; Headlee Drug Co., Searcy; J. J. Cone, Est., Grocers, Snyder; L. H. Morphey & Co., Stuttgart.

The Howard-Pike County Medical Society elected the following officers for 1928:

President, D. A. Hutchinson, Nashville; Vice-President, W. M. Gibson, Nashville; Secretary-Treasurer, W. Ridley Lee, Mineral Springs.

Dr. Robert H. Ray is now located at Earle, having moved from Twist, Arkansas.

At the regular meeting of the Garland County-Hot Springs Medical Society, the following named officers were elected for the year 1928:

President, Dr. O. H. King; Vice-President, Dr. H. King Wade; Secretary-Treasurer, Dr. Gaston Hebert; Censor for three years, Dr. J. L. Greene; Delegates to the State Society, Drs. J. M. Proctor, C. E. Garratt, G. B. Fletcher; Alternates, Drs. E. A. Purdum, E. R. Browning and C. S. Moss.

Dr. and Mrs. L. D. Reagan and children of Little Rock recently visited Mrs. Cora Reagan, Dr. Reagan's mother in Columbia County.

At the December meeting of the Pulaski County Medical Society the following officers were elected for the year 1928: President, R. J. Calcote; Vice-President, Homer Scott; Secretary, Geo. H. Lewis; Treasurer, Wm. R. Bathurst.

DUES! Your 1928 dues are now payable. Get it off your chest by sending your check to your County Secretary today. By prompt payment, relieve your local Secretary of having to camp on your trail. Your annual dues bring you greater returns than any other investment you own.

County Societies

BENTON COUNTY

(Reported by H. J. G. KOOBS, Secretary)

The regular annual meeting of the Benton County Medical Society was held in the Masonic Hall at Bentonville, December 8, 1927.

Present: Atkinson, Harrison, Steele, Smiley, Lindsey, Moore, Pickens, Koobs, Wilson, McNeil, Love and Greene.

It was unanimously voted to confer Honorary Life Membership in the Benton County Medical Society upon Dr. Chas H. Cargile.

The Secretary-Treasurer gave his annual report, which was accepted and ordered placed on file.

Then followed a discussion regarding the number of meetings to be held during 1928. It was finally voted to revert to the monthly meetings. The program committee for the next year is composed of the president, vice-president and secretary. They are to arrange the program and determine the time and place the meetings are to be held.

A letter from Dr. J. C. Ramsey, asking for certain indorsement, was read, and after considerable discussion the matter was referred to the program committee with instructions to make further inquiry and report on same at the next regular meeting.

The secretary called attention to a letter from the Government C. M. T. C. officer, who asked all physicians to make free examinations and to give antityphoid and smallpox vaccinations free of charge to all ex-service men. It was suggested that, in as much, as every ex-service man needing the services of a physician for any cause whatever (regardless of whether the illness was the result of service conditions or acquired in private life), could, and was encouraged to, go to the centralized Government Hospital for treatment, thus robbing the general medical men of some of their legitimate business. It being unfair to ask these same physicians, who were thus discriminated against, to make these examinations without pay. It is not so much the making of these examinations that was objected to, as was the pernicious practice that has been instituted by the Government of taking away legitimate pay work from the doctor by sending the ex-service men, for every imaginable ill, to the centralized hospitals as before stated.

It was resolved that this matter be presented to the House of Delegates at the next State meeting, and ask that they take some action in this matter. The secretary was instructed to give a copy of this resolution, and reasons for same, to the delegate from Benton County to be presented to the State Society at the next meeting.

The officers elected for 1928 were:

President, J. L. Clemmer, Gentry; Vice-President, Guy Hodges, Rogers; Secretary-Treasurer, C. S. Wilson, Siloam Springs; Censor, A. J. Harrison, Lowell.

As the amount of business that came before the Society consumed so much time, the scientific program arranged for was carried over to the next meeting.

LAWRENCE COUNTY

(Reported by W. W. HATCHER, Secretary)

The Lawrence County Medical Society met with Dr. J. C. Hughes of Hoxie, December 7, 1927.

Present: Johnston, Land, Townsend, Warren, Guthrie, Henderson, Neece, Hughes and Hatcher.

Papers read were: "Infantile Paralysis" by T. C. Neece, and "The Strenuous Life of Medicine" by C. C. Townsend.

Election of officers for 1928:

President, Wm. Johnston, Hardy; Vice-President, G. A. Warren, Black Rock; Secretary-Treasurer, W. W. Hatcher, Imboden; Delegate to the State Medical Society, J. C. Hughes, Hoxie; Alternate, T. C. Neece, Walnut Ridge.

Delicious refreshments were served by Dr. and Mrs. Hughes.

MISSISSIPPI COUNTY

(Reported by F. D. SMITH, Secretary)

The Mississippi County Medical Society held the last regular meeting of the year, Tuesday, December 13, in the banquet room, Noble Hotel, Blytheville.

Present: Hosey of Joiner; Johnson of Bassett; Massey of Oseeola; Hudson of Luxora; Sims of Burdette; Tidwell of Dell; Martin, Wilson, Usrey, Grimmett, Saliba, Johnson and Smith of Blytheville. A. M. Washburn, U. S., P. H. S., of Blytheville was a visitor.

Interesting talks were made, commenting on the work of the Society during the year and outlining plans for the coming year.

Officers elected for the coming year were as follows: President, C. E. Wilson, Blytheville; Vice-President, R. L. Johnson, Bassett; Secretary-Treasurer, F. D. Smith, Blytheville (re-elected); Censor, H. C. Sims, Burdette.

The application for membership of A. M. Washburn was received and referred to the Board of Censors.

The next meeting will be held in Oseeola, in January.

WHITE COUNTY

(Reported by F. P. HARDY, Secretary)

The White County Medical Society met in regular session in Searey, January 5, 1928. L. E. Moore, President, in the chair.

Present: Allbright, Jones, Burge, Sloan, Purnell and Hardy.

Case Reports: "Fracture of Skull," with x-ray picture, by Dr. F. L. Purnell of Kensett. "Glandular Tularemia" by Dr. F. P. Hardy of Center Hill.

As a token of its appreciation for his long and faithful service as Secretary and as a mark of respect for his high standing in organized medicine, the Society voted unanimously to pay out of its funds the dues of Dr. J. L. Jones, for life.

The next meeting will be held in Beebe, February 2, 1928, at 7:30 p. m.

WOODRUFF COUNTY

(Reported by L. E. BILES, Secretary)

The Woodruff County Medical Society met in McCrory, December 15, 1927. Dr. J. W. Morris, President, presiding.

Present: Morris, Brewster, Fraser, West, Brewer, Hancock, Biles. Visitor: J. A. Hays.

Officers elected for the ensuing year were:

President, M. A. Porter, Hunter; Vice-President, J. W. Morris, McCrory; Secretary-Treasurer, L. E. Biles, Augusta; Delegate to State meeting, E. F. Brewer, Augusta; Alternate, W. G. Hancock, Cotton Plant.

McCrory was selected as the permanent meeting place.

The subject of midwifery was discussed, and it was voted that the delegate be instructed to place this matter before the State Society at the next meeting, and, if possible, have all who wish to practice midwifery pass a satisfactory examination.

It was moved and carried that a committee be appointed to investigate and report at the next meeting the manner in which other States controlled such practice. The committee appointed was Drs. Hays, Fraser and Hancock.

Book Reviews

Management of the Sick Infant.—By Langley Porter, B. S., M. D., M. R. C. S. (Eng.), L. R. C. P. (Lond.), Professor of Clinical Pediatrics, University of California Medical School, and William E. Carter, M. D., Instructor in Pediatrics, University of California Medical School, San Francisco. Third Revised Edition. Illustrated. Published by The C. V. Mosby Company, 1927. Price, \$8.50.

In this volume we find all of the important and practical things which have developed since the former editions appeared. The following chapters constitute Part one: General Considerations; Vomiting; Diarrhea; Consti-

pation; Nutrition; Hemorrhage; Pain and Tenderness; Convulsions and Syncope; Fever; Cough, and Prematurity. In part two the following: Diseases of the Respiratory Tract; Diseases of the Digestive Tract; Diseases of the Heart and Circulation; Diseases of the Blood and Lymphatic System; Diseases of the Nervous System; Skin Diseases; Genitourinary Diseases; Diseases of the Osseous System; Internal Secretions, and Infectious Diseases. In Part three: Methods; Formulas and Recipes; Drugs and Poisoning.

Bats, Mosquitoes and Dollars.—By Dr. Charles A. R. Campbell. Published by The Stratford Company, Boston, Massachusetts, 1925.

The author of this book has made a study of how malaria can be exterminated and presents in this book the how and why of this world-wide disease.

Examination of Children by Clinical and Laboratory Methods.—By Abraham Levinson, B. S., M. D., Associate in Pediatrics, Northwestern University Medical School; Attending Physician, Children's Department, Cook County Hospital, Chicago. Second Edition, with eighty-five illustrations. Published by The C. V. Mosby Company, St. Louis, 1927. Price, \$3.50.

This book discusses both the clinical value and limitations of laboratory tests in their relation to pediatrics. In studying case history the importance of the various questions in relation to diagnosis is considered. In studying the physical examination, the importance of various procedures is discussed in connection with diagnosis.

Obituary

SCOTT, CHARLES V., M. D.—Dr. C. V. Scott of Little Rock died January 8, 1928. Aged 60. He had been a resident and practicing physician of Little Rock since his graduation from the University of Arkansas Medical School in 1904. He was a member of the staffs of the General and Baptist State Hospitals and St. Vincent's Infirmary, the Pulaski County and Arkansas Medical Society and the American Medical Association.

He is survived by his wife, one daughter, Mrs. I. J. Steed of Little Rock; four brothers, E. W. Scott of Little Rock, R. E. L. Scott of Pinnacle, James Scott of Fort Worth, Texas, and Everett Scott of Houston, Texas and three grandchildren.

THE JOURNAL

OF THE Arkansas Medical Society

PUBLISHED MONTHLY UNDER THE DIRECTION OF THE COUNCIL

Vol. XXIV

LITTLE ROCK, ARK., FEBRUARY, 1928

No. 9

Original Articles

TREATMENT OF EPIDIDYMITIS*

H. KING WADE, M. D., Hot Springs.

The purpose of this paper is to discuss the treatment of a condition that is met by the general practitioner, general surgeon and specialist; and one, in my opinion, which has not been given enough consideration by any of us. I will attempt to outline a form of treatment that can be carried out as successfully in the office and home as in the hospital. My aim is to elucidate the form of treatment which has given the shortest convalescence, least amount of pain and fewest cases of sterility.

First, I think we should have a good working knowledge of the anatomy of the epididymis and a brief review will be given here. The epididymis is divided into the globus minor, body and globus major. The tubules of the rete testis coalesce to form about ten or twelve tubules called the vas efferentia which emerge from the limitations of the testicle and are thrown into numerous folds making up the globus major or the head of the epididymis. The tubules are lined by a simple or stratified columnar epithelium which is covered with long cilia. The epithelium is arranged on a thick fibrous wall in which are included some smooth muscle fibers. As the convoluted tubules approach the body they coalesce decreasing in number as their lumen increase in size. This is continued into the globus minor, or tail, and thence into the vas deferens, which is a tube about twenty inches in length and extends from the tail of the epididymis to the seminal vesicle. The walls of the vas deferens are made up first of an internal layer

of ciliated epithelium upon a thick basement membrane; beneath this is a thin layer of areolar connective tissue followed by an inner circular and an outer longitudinal coat of smooth muscle.

ETIOLOGY: As gonorrheal infection of the epididymis is by far the most frequent type, it will receive more consideration in this paper. However; there exist the non-gonorrheal and traumatic types. In the specific, or gonorrheal type, the infection passes from the posterior urethra and enters the seminal canal through the ejaculatory duct and passes through the vesicle down the vas deferens to the epididymis. Tuberculosis may involve the epididymis but usually it is secondary. Trauma may be an etiological factor, but here the orchitis usually is more prominent. The non-specific type usually follows manipulations in the posterior urethra such as dilatation of urethral strictures, undue pressure in prostatic massages, especially if much pressure is placed upon the seminal vesicles. Many cases follow prostatectomies.

SYMPTOMS, PATHOLOGY AND TREATMENT: As no attempt has been made heretofore to classify the different stages of gonorrheal epididymitis, the following classification which I presented to the Southwestern Urological Association in 1926 has so far proven very satisfactory and scientific. From the clinical symptoms and pathological manifestations I have found all cases of infectious epididymitis to come under one of five stages. A discussion of the stages from the first symptoms to the stage of resolution will be given here with the pathology that occurs and the most efficacious treatment for each stage.

In the first stage the patient usually presents himself complaining of pain in the groin and along the course of the vas deferens. There is a general feeling of discomfort, which indicates that there is present a vasitis and the descending infection will soon involve the epididymis.

*Read before the 52nd Annual Meeting of the Arkansas Medical Society, held in Little Rock, May 11, 12, 13, 1927.

dymis. In the vas deferens there is intense hyperemia with edema of the connective tissue and swelling of the ciliated epithelium, accumulation of lymphocytes in the stroma and a diapedesis of the polymorphonuclears from the stroma through the mucosa. This patient is immediately put to bed without further local treatment to the urethra and prostate. Ice is applied to the painful area, the scrotum is elevated and fifteen grains of calcium chloride is administered intravenously daily until the pain disappears. Sodium iodide is also used intravenously in twenty to forty grain doses. It, however, has not been as satisfactory in my hands as the calcium chloride.

At this stage a vas puncture with injection of the seminal vesicle on the affected side can be done with very satisfactory results. This is an attempt at abortive treatment.

The second stage, according to this classification, is where the epididymis has become involved; there is slight swelling in the epididymis, tenderness and pain along the course of the vas deferens and general malaise. There is a repetition of the pathology here in the epididymis as in the vas deferens. At this stage proliferative activity on the part of the fibroblasts at the periphery of the active inflammatory reaction is conspicuous. Fibrin makes its appearance in the stroma and on the tunica albuginea. This patient is also put at complete rest, calcium chloride is used daily intravenously, the scrotum is elevated and an ice bag is applied. Diathermy may be used to good advantage. The epididymitis may subside at this stage or may pass into the third stage.

In the third stage there is considerable enlargement of the epididymis and all the symptoms are very much more severe than in the previous stage. In this stage, in many small areas the lining epithelium has disappeared and the purulent contents of the tubules coalesce. The epididymis is swollen, fluctuation may be detected and there is present a moderate amount of associated orchitis. Organization of the fibrin by proliferating fibroblasts and newly formed capillaries is well advanced. In some of these cases I feel justified in prescribing rest and using the expectant treatment such as has been outlined above; but many of them should be treated by epididymotomy. The condition may subside here or pass into the fourth stage.

In the fourth stage the epididymis is enormously enlarged with an associated orchitis of

more or less severity, hydrocele makes its appearance. There is an elevation of temperature and a marked leucocytosis; the patient is very toxic and is suffering intensely. The pathological process has reached its maximum intensity after which permanent changes will take place; marked accumulation of purulent material in the lumen, connective tissue becomes more conspicuous. All these cases, in our estimation, should be treated by the radical or surgical method, which is epididymotomy. Hagner reported his operation for relief of epididymitis about 1905. This consists of opening and freely draining the epididymis of purulent material. This can easily be done under local anesthesia. The technique which we use is the injection of 5 c.c.'s of one-half of 1 per cent novocain with adrenalin into and around the structures of the cord at the external abdominal ring. Then the testicle is picked up carefully and the area over the globus minor, or tail, of the epididymis and body are carefully infiltrated. An incision of about two inches is made through the scrotum down to and exposing the epididymis. Multiple punctures are made into the globus minor so that there is free and complete drainage. The tunica vaginalis is picked up and sutured to the skin surface to facilitate drainage and to prevent a too hasty closure of the incision. A wick is inserted into the incision and wet dressings are applied. This procedure immediately produces cessation of pain, subsidence of temperature and greatly shortens the period of convalescence. It makes possible an early resumption of treatment to the prostate and urethra and, further, it lessens the possibility of sterility which is so frequently produced by this pathological process.

In the fifth stage, or the stage of resolution, there is a gradual disappearance of the exudate, a more marked amount of fibrous connective tissue producing stenosed tubules, or even occlusion. The same may occur in the lumen of the vas deferens. In either case azoospermia is the result. Surgical interference in this stage would have as its object only the drainage of a possible focal infection which produces from time to time a sensitiveness in the epididymis, or even a recurrence of the diseases in the upper genital tract.

Epididymitis occurs in 20 per cent of all prostatectomies. This can be prevented by a very few minutes work five days before the major operation. By using local anesthesia, small incisions are made in the scrotum, each

vas is picked up and one centimeter removed; both ends of the vas ligated and the scrotum closed.

SUMMARY

First: By early recognition of symptoms of vasitis, abortive treatment consisting of the use of calcium chloride or sodium iodide intravenously, rest in bed and local applications, or by vas injections, may be successfully instituted.

Second: In advanced stages of epididymitis, epididymotomy is the treatment of choice and should be performed early enough to prevent permanent damage in the epididymis and cord, best results being obtained by this procedure in the first four or five days, as proven by the high percentage of patent vas deferens found on performing vas injections afterward.

Third: Early treatment can be instituted to the prostate, seminal vesicles and urethra after epididymotomy, thereby greatly reducing the period of disability.

Fourth: Sterility may be prevented in a large percentage of patients by the performance of an epididymotomy in selected cases.

Fifth: A section of the vas before prostatectomies will eliminate one of the common and distressing complications following enucleation of the prostate.

DISCUSSION

DR. FAY JONES, Little Rock: Dr. Wade's classification of epididymitis, I think, is one of the best I have ever heard; in fact, the only classification that covers the case entirely. This interesting subject he has covered most thoroughly. Calcium chloride is a drug we have found in the last year to be of great value. It seems to give us the best results. Sodium iodide, as he mentioned in his paper, has been used heretofore, but we find that calcium chloride gives the best results. I think the drug should be freshly prepared, because it seems to lose its potency after a few weeks.

Diathermy is excellent early in epididymitis, later I don't think it has any effect at all; in fact, it is contraindicated in the later stages.

Surgical procedure in the fourth stage, I think, is very essential, as Dr. Wade has shown us in his paper. Early surgical procedure prevents sterility.

If you don't evacuate the pus early, there is no use to do it. Just remember that.

He mentioned the fact that epididymitis followed prostatectomy in about 20 per cent of the cases. I think that is too low. I believe about 30 to 35 per cent of the cases would be more accurate, according to my experience. Ligation of the vas preceding a prostatectomy is often advised, as it frequently shortens the convalescing period.

DR. WADE in response: I wish to mention one other complication in epididymitis and that is neurasthenia. Many of these patients become neurasthenic and are a great worry to the profession. For this reason we should treat epididymitis more seriously and more scientifically. We should no longer depend upon the old treatment of plac-

ing the patient at rest and using ice caps and poultices. If we would give them a little more care we would greatly reduce the number of cases of sterility and neurasthenia.

ELECTROTHERAPY IN THE TREATMENT OF VOMITING OF PREGNANCY*

T. H. JONES, M. D., Magnolia

It is my intention to bring before this body, mostly of general practitioners, a short paper on the treatment of this distressing condition, which we all have to face, and sometimes would give most anything for something to give relief. This method I am going to give is not a cureall by any means; but I think when used rightly will give relief in a number of cases where other methods have failed.

When we consider that a great many of these cases are due to an irritable condition of the pneumogastric nerve, caused by reflex action, we can then realize that the use of the usual remedies for an irritated stomach, such as ingluvin, cerium oxalate, bismuth, pepsin, etc., are utterly powerless to relieve the condition.

The galvanic current which flows in the same direction from the positive to the negative has opposite chemical reactions where the current comes in contact with the body. The positive producing an acid reaction and a sedative condition, and the negative an alkaline reaction and an irritable condition. The latter we very well know from experience with a case. The machine we now have came set up with the indicator reading negative, where it should have read positive. We had a negro patient that was extremely sick and nothing we tried in the way of medical aid availed anything; so we brought her to the office with a great deal of worry and trouble and gave her the negative current where we should have been given the positive. Fortunately for her we were able to give only seven minutes, as the vomiting became so severe we had to stop. We thought she was a bad patient before we gave the treatment, but we do not see how a patient could live and vomit the way she did after the treatment. It is needless to say she did not care to try any more electro-therapy.

*Read before the 52nd Annual Meeting of the Arkansas Medical Society, held in Little Rock, May, 11, 12, 13, 1927.

The technique we follow in treating these cases is as follows: We wet a large pad that will cover most of the abdomen and attach it to the negative pole of the galvanic machine. Then two small sponge discs about the size of a dollar are attached to the double end of a bifurcated cord, each of which is placed over the pneumogastric nerve in a sub-aural position. The single end of the cord is attached to the positive pole. The current is slowly turned on to from fifteen to twenty milliamperes. Some patients are able to stand more than others. This is maintained for ten to fifteen minutes. In obstinate cases the treatment is given twice a day.

I will now give a few cases in support of my treatment, and also give the failures we have had. Mr. G. came to my office March 1, 1926. He said his wife was pregnant and was very sick at her stomach. This being her first pregnancy she was much distressed about it. I advised bringing her to the office for treatment, which he did, and we gave her a fifteen minute treatment. I told her to come back the next day, but because she experienced very little nausea and no vomiting she did not report. On the third day Mr. G. called me to their home. I found her with a temperature of 102, coughing, and with every symptom of influenza. She was vomiting everything that went into her stomach. I tried to quiet the vomiting, and to give her something for her cough; but she could retain nothing even a few minutes. The next day she was nearly exhausted and was badly in need of water I decided to take our galvanic machine to the house in a truck and give her a few treatments. After giving her a fifteen minute treatment, as outlined above, she called for some water and nourishment and retained it. She drank water freely through the night. Early the next morning I gave her a treatment before giving her any nourishment. I then started her on a cough mixture every three hours without her vomiting one time. I continued her treatments two more days and she went to term without any further trouble.

I was called to the home of Mrs. B., April 29, 1926, and found her vomiting incessantly. She was over two months pregnant and had been vomiting some for two weeks. She gave a history of losing her last two babies by vomiting. She was a large woman, weighing about 265 pounds, and for two days had been suffering with a severe pain in her back; so much so, she had to have help to turn in the

bed. They did not have electric current in their home, so that ruled out carrying the machine there. I tried everything I knew of to relieve her vomiting and backache with very little success, and on the third day, persuaded her to let us carry her to the office. I gave her a fifteen minute treatment as described above, and thirty minutes of diathermy on her back. Soon after she arrived home she ate and retained a pint of ice cream, the first food in several days. The next morning when I arrived at my office she was sitting in my waiting room, waiting for a treatment. She had vomited only once that morning, and was anxious to get her treatment so she could eat breakfast. I continued her treatment for four days without any return of trouble.

The two cases given above were extreme cases where relief had to be obtained. However, the greatest number of cases we general practitioners have to meet with are patients that are nauseated part of the day, and perhaps vomit a few times; but in a few weeks clear up without any treatment at all.

These patients are extremely grateful if they can be relieved of this troublesome few weeks. The following is a representative of this class.

A negro woman came into my office last December complaining of vomiting a few times every morning, but up in the day would have no trouble. I gave her a treatment and told her to come back as soon as she could. She lived twelve miles in the country, over roads almost impassable, and a wagon as the only means of travel. In four days she came back for another treatment, having been relieved for three days. She came again in a week having a slight return of the symptoms. Then in three days she had to return to town on other business, so I gave her another treatment which was her last. I saw her husband one month later and he said her nausea and vomiting had not returned.

We have had two cases that did not seem to respond satisfactorily to the treatment, especially one. She came to us on March 16, 1927 and was one of the extreme cases. She gave a history of vomiting her last eight months in her only previous pregnancy, and spent most of that time in bed. She was vomiting almost every hour of the day and night, and was willing to give anything a fair trial. We gave her two treatments a day for eight days without any letup of her nausea and vomiting. She had a great deal of pelvic

inflammation, to which we then directed all of our attention, giving no relief. Corpus luteum intravenously, gave some relief for a short while; but as far as the galvanic treatment was concerned, we could not tell that she derived any good whatsoever from it.

The last case I wish to present was also unsatisfactory, not so much from the treatment point of view as the patient. On December 12, 1926, Mr. H. came to my office to talk to me about his wife. They had only been married a short while, and from the history I judged his wife to be pregnant. This diagnosis he did not want to accept, but insisted that his wife was only bilious, a term we country doctors frequently hear. On December 22, I was called to their home nine miles in the country. She had then been on the bed a week, and was vomiting all nourishment. They still did not want to believe that she was pregnant, but wanted me to give her something to make her sickness come on, and then everything would be all right. This, of course, I refused to do. I finally persuaded them to bring her to the office. I gave her a treatment about 4 p. m., and she returned home, ate supper, dressed, and went to a play in a neighboring schoolhouse. The next morning she vomited once. I told them to be back the next morning, but they did not report. On December 24 they came back and said that her vomiting was better, but that she was still nauseated. I gave her another treatment and did not hear from her for ten days when her husband came in and said she had vomited once on the way home, and only a few times since, but was nauseated most of the time. They were dissatisfied with the galvanic treatment. He asked about taking her to Texarkana to a hospital, to which I readily agreed. She only stayed two or three days, and then went somewhere else, I know not where. I received the impression from the start that operative interference was what they were seeking. Dr. Beck afterwards told me he had the same suspicion.

DISCUSSION

DR. H. THIBAUT, Scott: The more I hear of these electric therapies, the more incompetent I feel; but we ordinary doctors, in the anatomy around the chest and neck, are rather mixed up.

It is strange to me that a man can apply a negative electrode to the belly and two positive electrodes to the neck, and then have the current to act on the vagus nerve only, omitting the phrenic cutaneous nerve, the intercostal nerves and the sympathetic nerves in the chest and abdomen. These men have a selection that we are unable to accomplish anywhere else. It would be a boon to us ignorant fellows if Dr. Jones would tell us how to make the selection of nerves.

DR. JONES, in response: I haven't anything further to say except to say that it is a fact, and they can try and see. As Dr. Thibault said, I don't know why it would have a selection for the pneumogastric nerve and not the others. In fact, with the other nerves, I can say it would do no harm. I have tried it in a good many cases and certainly have gotten some wonderful relief when we tried everything else and could not. It seems that sometimes one treatment will give instant relief.

Abstract

PHYSICIAN AND HIS BANK

Merryle Stanley Rukeyser, New York (Journal A. M. A., Dec. 24, 1927), suggests that physicians: Select a competent banker and repose trust in him. Ascertain from their banker what banking services would meet their special needs. Build up enough working capital out of earnings to obviate the need of becoming a chronic borrower. To meet emergencies, be prepared with good collateral in the form of stocks and bonds, against which one can procure bank loans. Be systematic in the handling of the business side of their professional activities; send out monthly bills and insist on prompt payments. In providing for their dependents, get the advice of a banker concerning insurance and living trusts.

THE COUNTY MEDICAL SOCIETY

The County Medical Society is the professional and social clearing house of the medical men of the county; the cemetery of envy, hatred and uncharitableness; the whip that stings the inert to activity and the spur that can make itself a power of life. It likewises drives the lazy and self-satisfied. It is a body which increases the strength of the profession and of its individual members—*The Bucks County Medical Monthly*.

THE JOURNAL

OF THE

ARKANSAS MEDICAL SOCIETY

Owned by the Arkansas Medical Society and Published
under the direction of the Council.

WILLIAM R. BATHURST, Editor
810-812 Boyle Building, Little Rock, Arkansas.

Published Monthly. Subscription \$3.00 per year; single
copies 25 cents.

Entered as second-class matter, June 21, 1906, at the
postoffice at Little Rock, Arkansas, under the Act of
Congress of March 3, 1879.

Acceptance for mailing at special rate of postage pro-
vided for in Section 1103, Act of October 3, 1917, autho-
rized August 1, 1918.

The advertising policy of this Journal is governed by
the rules of the Council on Pharmacy and Chemistry of
the American Medical Association.

All communications of this Journal must be made to it
exclusively. Communications and items of general inter-
est to the profession are invited from all over the State.
Notice of deaths, removals from the state, changes of
location, etc., are requested.

OFFICERS OF THE ARKANSAS MEDICAL SOCIETY

HENRY THIBAUT, President.....	Scott
R. H. T. MANN, President-Elect.....	Texarkana
HOMER SCOTT, First Vice-President.....	Little Rock
J. B. WHARTON, Second Vice-President.....	El Dorado
O. J. T. JOHNSTON, Third Vice-President.....	Batesville
R. J. CALCOTE, Treasurer.....	Little Rock
Wm. R. BATHURST, Secretary.....	Little Rock

COUNCILORS

First District—W. W. VERSER.....	Harrisburg
Second District—J. L. JONES.....	Searcy
Third District—M. C. JOHN.....	Stuttgart
Fourth District—W. T. LOWE.....	Pine Bluff
Fifth District—L. L. PURIFOY.....	El Dorado
Sixth District—B. C. MIDDLETON.....	Texarkana
Seventh District—DEWELL GANN, SR.....	Benton
Eighth District—ANDERSON WATKINS.....	Little Rock
Ninth District—SAM G. DANIEL.....	Marshall
Tenth District—THOMAS DOUGLASS.....	Ozark

COMMITTEES

SCIENTIFIC PROGRAM—R. J. Calcote, Little Rock,
chairman; A. D. Cathey, El Dorado; O. A. Carruth, Little
Rock.

SCIENTIFIC EXHIBIT—Chas. E. Oates, Little Rock,
chairman; O. C. Melson, Little Rock; M. V. Russell, El
Dorado.

STUDENT LOAN FUND—E. F. Ellis, Fayetteville, chair-
man; Henry Thibault, Scott; Wm. R. Bathurst, Little Rock.

NECROLOGY—F. A. Corn, Lonoke, chairman; M. C. John,
Stuttgart; Geo. B. Fletcher, Hot Springs.

MEDICAL LEGISLATION—Frank Vinsonhaler, Little
Rock, chairman; M. D. Ogden, Little Rock; A. C. Watson,
England.

HEALTH AND PUBLIC INSTRUCTION—John R. Dib-
rell, Little Rock, chairman; Anderson Watkins, Little Rock;
E. L. Watson, Newport.

CANCER CONTROL—A. M. Zell, Little Rock, chairman;
A. A. Gilbert, Fayetteville; W. E. Stallings, Newport.

INFANT WELFARE—Clinton A. Rice, Rogers, chairman;
A. C. Kirby, Little Rock; H. A. Ross, Arkadelphia.

HOSPITALS—W. G. Eberle, Fort Smith, chairman; J. A.
Foltz, Fort Smith; J. W. Butts, Helena.

Editorial

THE MODEST HONORARIUM

That the laborer is worthy of his hire is a
matter of scriptural warrant. The only ques-
tion is who is to fix the scale. If the employer,
it is not likely to be excessive; if the worthy
laborer, then the employer may hold it ex-
cessive. And there you are. But the laborer
may be offered the alternative, "Take it or
leave it" in which case acceptance may de-
pend on how hungry the laborer is.

This is merely a prelude or text. The real
matter has to do with the doctor's fee to be
paid by insurance companies for information
regarding prospects, who, believing that death
is common, as Hamlet admits—think to leave
something for their reliefs to enjoy when the
wage earner has left this vale of tears, for let
us hope, a happier land. The old line insur-
ance companies usually take no chances before
the prospect has been duly examined by a rep-
utable physician. After the "doc" has
thumped his chest, sounded around his liver
and lights, taken count of his pulse and blood
pressure, taken height and fighting weight,
and done everything but hold an autopsy over
the prospect, found out whether his parents
and grandparents died of tuberculous or
heart disease, whether the subject has had
measles—if so, how many—whether his for-
bears have been in the bughouse and sundry
other intimate facts. If the subject comes
out alive and kicking after the ordeal and the
"doc" pronounces him fit, then, and not until
then, will the coveted policy be issued.

Recently a new style of insurance method
has come into being, under which no medical
examination is required, but the physician is
asked, or shall we say hired, to see the party
of the first part or second part, whichever is
the legal term, size him or her up, ask a lot of
questions and report his opinion, without any
chest thumping, pulse taking, examination of
urine, and all the rest of an actual physical
examination. Note how little he is required
to do to earn it and then pass your opinion of
the fee.

An illustration comes from Dr. S. W. Doug-
las of Eudora. He recently received a blank
to be filled out by the Insurance Service Com-
pany, Little Rock. A check for the fee is en-
closed—the company pays in advance. The
subject in this particular case lives one and
a half miles in a southerly direction of Chicot.

HYGEIA

(By R. J. CALCOTE)

That's all. Just a mile and a half. However, if he chances to have seen the party, he need not make a special trip, for the questionnaire merely asks when he saw the subject last. If he never had seen the subject, of course, he must hike or drive three miles there and back. He is to estimate the weight, height and age, like farmers do in guessing at hogs. They want to know his occupation and what are his general duties? Question 4: Has he drunk to excess in the past? Does he drink now? Has he ever used drugs? Has he taken cures for dope or booze? Is he interested personally in feuds? Has his life been threatened by enemies? Has he ever been convicted of law breaking? Have you heard that the party in question ever had any venereal disease? If so, when and what? Is he crippled or deformed? What is his reputation for morality? Any tuberculosis or insanity in his family? And so forth and so forth—a list of twenty questions and where the answer is affirmative as to any of these drawbacks to a full length life, there is a note in capitals "GIVE FULL DETAILS." And after all blanks are filled out there is an addendum which reads "BE SURE AND ADD ANYTHING ABOVE THAT COULD HAVE ANY BEARING ON THE MATTER."

Incidentally, the questionnaire is inscribed, "Confidential—Don't Delay. Please answer every question and return today if possible?"

And gentle reader, can you guess the generous fee paid in advance for this information? FIFTY CENTS. Can you beat it? If the "doc" could get through answering ten of these questionnaires per day, he might earn about half as much daily as a carpenter.

The writer of the letter (Insurance Service Company, Little Rock) enclosing the questionnaire seems to have a sense of humor. He admits the fee is small, but it is what a commercial agency reporter would receive and—get this—"In going through a commercial agency, it is depriving the doctors generally of a SUBSTANTIAL INCOME." The writer also cheerfully admits that another reason, besides the philanthropic one of helping the doctors make large incomes, is that he feels that doctors "give more accurate reports than we could get through commercial agencies."

It may be added that the regular fee paid for medical examinations for insurance companies is five dollars and up.

Need anything more be said?

At our medical meetings and elsewhere we frequently hear a desire expressed by members of our profession for more publicity on medical matters. It seems to be the idea or desire to broadcast to the public information as to what has been accomplished by the profession and what can be accomplished in the way of preventive medicine and curative measures; so that these measures may be more generally used. That such a program, properly executed, would be desirable is not doubted. It is an effectual means of curbing quackery and the public will be the gainer from better health and more effectual cures. The possibilities of such a program are great, and we know that if the public knew what we know, quackery and poor medical laws could not long exist.

But to be most effectual and to reach beyond any possibility of a rebound to our profession, this must be done very wisely. Certainly it can be done individually and we believe the expense of an adequate program is too great for a County or State Medical Society. This was one of the ideas which prompted the launching of *Hygeia* by the American Medical Association and we all know how well *Hygeia* has carried forward this idea. We believe this is just the agency we need and that it should be placed in every home possible.

Every month a number of good articles appear in *Hygeia* and you can find one that will exactly fit some particular patient that you are treating at that time. If you would hand the magazine to them they would read it gladly and in many instances would be a subscriber subsequently. Such was the experience of one physician in Little Rock. He handed to an expectant mother a copy containing an article on the "Importance of Breast Feeding," who he feared would not make much effort to so feed her child. She not only became a subscriber, but caused three of her friends to also subscribe. If you find an article which particularly appealed to you, you can obtain reprints and supply a number of patients. Such a plan would benefit your patients and no doubt would swell the circulation of this important broadcaster of medical knowledge.

Abstracts

OBESITY

Louis Bauman, New York (Journal A.M.A., Jan. 7, 1928) describes the modus operandi of an ambulatory clinic established for the purpose of advising and following adipose patients. The personnel consists of a dietitian, a clerical aide and a physician. The time allotted is from two to three hours of one morning each week. Patients are referred after a routine history has been taken and physical, urine and blood examinations have been made. The majority of the patients were women. While constitutional factors were present in some, lack of balance between ingestion of food and expenditure of energy was the prevailing cause of fat storage. Obesity frequently followed lactation, the mother having too zealously followed the advice "to eat plenty of nourishing food in order to furnish milk for the baby." In others, adiposity followed convalescence from operation or prolonged illness. Certain nationalities habitually consume quantities of high calory foods. The southern Italian, for example, liberally indulges in macaroni and olive oil; the Czechoslovakian eats considerable rye bread, potato dumplings and certain kinds of cake. It is difficult to wean foreign patients from these so-called national dishes. With regard to the prevention of obesity, mothers should be informed that overeating is a habit which may be acquired during childhood, often through the efforts of over-indulgent parents. Treatment consisted of a low calory diet, exercise and thyroxin in selected cases. The daily food allowance contained approximately 100 Gm. of carbohydrate, 70 of protein and 60 of fat. In hypertension, the protein intake was lowered and salt was also restricted; in patients with cardiac embarrassment, the water and salt intake was reduced. The exercise advised was daily walking of 2 miles in forty-five minutes or less, or calisthenics lasting ten minutes morning and night. It was apparent that ordinary housework could not replace systemic exercise. Thyroxin, 0.0008 Gm. daily, was administered to selected patients. No untoward effects were noticeable. The patient was warned to discontinue the hormone in the event of palpitation, cardiac pain, dyspnea or nervousness.

INCIDENCE AND MANAGEMENT OF HYPERTENSION

In thirty-five cases of essential hypertension, Leslie T. Gager, Washington, D. C. (Journal A. M. A., Jan 14, 1928), prescribed chemically pure potassium sulphocyanate, in simple aqueous solution of such strength that one fluidrachm (4 cc.) contained $1\frac{1}{2}$ grains (0.1 Gm.) of the salt. This dose was given in water by mouth three times daily, after meals, for the first week, twice daily for the second week, and then once daily for the third week of treatment. Thereafter, this dose was given daily, or every other day. In certain cases, the schedule of two or three doses a day was maintained for several weeks. Of the entire number of patients, there have been only three who have entirely resisted the blood pressure reducing effect of sulphocyanate. In twenty of a group of twenty-five patients who had been under observation for several months, there has occurred an individual fall in blood pressure of from 20 to 60 points. There has been less marked but definite lowering of the diastolic pressure. Such common symptoms as headache, nervousness, tingling sensations, a feeling of tension or irritability, dizziness and sleeplessness have been decreased, or even quite relieved, in individual patients. Four patients volunteered statements that they had not felt so well in years. After stopping the drug for two weeks, one woman found that her headaches and dizziness were returning, and her blood pressure was rising toward its former level. The results of the use of sulphocyanate have been almost uniformly satisfactory when the patients were co-operative and the physical obstacles to be overcome were not too great. It does not supplant any of the for the control of hypertension; indeed, its ultimate action on the smooth muscle cell of the arteriole may not be different from the effect of weight reduction or other metabolic changes, and one method of approach may supplement the other. The prophylactic and therapeutic use of sulphocyanate in hypertension would seem to deserve further trial.

TREATMENT OF PELVIC INFLAMMATION

To cure cervical gonorrhea is a long, hard and extremely tedious undertaking. Lucius E. Burch, Nashville, Tenn. (Journal A. M. A., Jan. 21, 1928), has devised a simple operation which has been used in a series of fifty cases.

The object of the procedure is to shift the source of infection from the closed cervical canal to an open surface. This gives free drainage and renders the application of germicides easy. The cervix is seized laterally with tenacula or hooks, and brought as near the introitus as possible; then it is opened anteriorly and posteriorly with the actual cautery. The incision extends to the internal os. Primary hemorrhage is usually negligible. The germicide is then applied to the endocervix by means of a gauze pack, which remains for twenty-four hours. Following the operation the patient receives a twenty minute douche each day. The antiseptic pack is replaced from every other to every third day. Fat-free milk is injected in the gluteal region; 5 cc. is the initial dose; 7 cc. is given the third day, 10 cc. the sixth day, and 10 cc. every third day thereafter. The cervix heals nicely, and leaves a linear scar on the anterior and posterior lips. Five patients with obstructive dysmenorrhea were relieved of this symptom following the operation. Milk has been a decided help in the treatment; 311 injections were given with only one abscess. There was one case of gonorrheal tenosynovitis. This quickly disappeared with the elimination of the focus of infection. The same result was accomplished in three cases of gonorrheal rheumatism. In one case of double phlebitis mereurochrome-220 soluble was given intravenously. The result was marvelous. The pain and swelling quickly subsided, and the smear became negative and remained so. In uncomplicated cases mereurochrome never helped the gonorrhea. The germicides used were mild silver protein, mereurochrome, strong silver protein, trinitrophenol, tincture of iodine, zinc chloride and aeriflavine. Diathermy and fulguration has not been of benefit in a small number of cases. Sacral anesthesia has been used very satisfactorily in twenty cases. The operation mentioned is said to have the following advantages: It is simple and easy; it cures the gonorrhea and stops leukorrheal discharge; it eliminates the focus of infection; it prevents the chance of reinfection to tubes and gives nature, aided by protein therapy, and opportunity to produce absorption of inflammatory products.

LOCAL MEDICAL SOCIETY AND PUBLIC HEALTH

G. A. Carpenter, Kent Darrow and Arthur C. Morris, Fargo, N. D. (Journal A. M. A., Jan. 21, 1928), detail the results of the active participation of a local medical society in the organization and guidance of a community health program. The Cass County Medical Society, representing the physicians of Fargo, N. D., has co-operated actively in a community health program since 1923. The medical society has given advice and assistance to the health officer and the child health demonstration through the medium of advisory committees appointed by the medical society. Of twenty physicians questioned in 1927, ten, including physicians primarily interested in pediatrics, obstetrics and internal medicine, have noted an increased interest in health among their clientele. Fargo's health score, based on the American Public Health Association appraisal form, has increased from 320 in 1922 to 814 in 1926. That actual preventive practice is increasing in Fargo seems certain. A limited number of adults are presenting themselves for periodic examination and health advice. There is a constant demand for health service by pregnant women. A recent survey of 522 prenatal cases shows that in 50 per cent the women consulted their physicians at or before the sixth month of pregnancy, and that only twenty-nine waited until labor began before calling a physician. The known measures of health supervision and diseases prevention are available and being used for children. The services already initiated by the medical profession have been given in added stimulus by this united effort, with official and nonofficial health agencies participating, in such a way that the whole health movement in Fargo appears to have been put on a sound and, it is to be hoped, a lasting basis. Without such unity of purpose and understanding, neither the medical profession nor the health agency can accomplish as much as both have a right to expect in furthering the health interests of the community.

Personal and News Items

Dr. J. R. Loftis has moved from Maynard, Arkansas, to Pocahontas.

The Tri-States Medical Association of Mississippi, Arkansas and Tennessee, will meet at Hotel Peabody, in Memphis, on February 29, March 1, 2, 1928. Read the list of speakers further over in this issue and begin right now arranging your affairs so you can hear every one of them. It means an intensive, varied, post-graduate course you can't afford to miss! If you fail to receive a program, write me for one. Address: Dr. A. F. Cooper, Secretary-Treasurer, Bank of Commerce Bldg., Memphis, Tenn.

Dr. R. L. Little of Judsonia, Dr. Geo. G. Woods of Huntington and Walter Cale of Chickalah, were recent visitors to Little Rock.

Dr. Jay Frank Schamberg of Philadelphia has recently been in Hot Springs making a study of the hot radio-active waters there and also the work being done at the United States Public Health Service Clinic.

Dr. J. P. Runyan announces the opening of St. Luke's Hospital, 20th Street and Schiller Avenue. The hospital has been entirely remodeled, new equipment has been added, and made modern in every respect.

WANTED—Salaried appointments for Class A physicians in all branches of the medical profession. Let us put you in touch with the best man for your opening. Our nation-wide connections enable us to give superior service. Aznoe's National Physicians' Exchange, 30 North Michigan, Chicago. Established 1896. Member the Chicago Association of Commerce.—(Adv).

All members wishing to read papers at the annual session, El Dorado, must make their reservations at once with the Program Committee, Dr. R. J. Calcote, Chairman 831 Donaghey Building, Little Rock.

The Columbia County Medical Society met January 24, 1928, and elected the following officers for the ensuing year: President, J. C. Walker; Vice-President, W. P. Cooksey, Secretary, C. T. McWilliams; Delegate to the State Meeting, W. H. Horn; Alternate Delegate, H. K. Carrington.

Dr. O. O. Jones of Little Rock has moved to Monroe, Louisiana.

The School of Medicine of the University of Arkansas will offer to physicians over the State during the month of March a brief extension feature in diagnosis of diseases of the chest. This will consist of two evenings of lectures at points to be determined in connection with local medical societies.

In undertaking this service the Medical School is co-operating with the National Tuberculosis Association and its affiliated State branch, the Arkansas Tuberculosis Association in the nation-wide campaign on the early diagnosis of tuberculosis which is being put on during the month of March. Members of the Arkansas Medical Society will receive full particulars direct from the Dean of the Medical School when all arrangements are perfected.

Extensive publicity features for the laity will mark the early diagnosis campaign, as the billboard companies, the public utilities and the press are co-operating with the National Tuberculosis Association in its effort to educate the general public on the importance of early diagnosis.

The 13th Annual Convention of the Catholic Hospital Association of the United States and Canada and the Second Annual Hospital Clinical Congress of North America will be held in the Cincinnati Music Hall, Cincinnati, Ohio, June 18th to 22nd, inclusive, 1928. The Fourth Annual Convention of the International Guild of Nurses will be held at the same time, in the same building, at night meetings.

Outstanding authorities in medicine, surgery, pathology, nursing, dietetics and hospital administration, architecture and engineering will lecture and demonstrate in specially planned clinics representing the various departments of the modern hospital. A professional program of the highest interest and value is now being formulated, and all persons interested in medical and hospital service are cordially invited to attend. Further information may be obtained from John R. Hughes, M. D., Dean of the College of Hospital Administration, Marquette University, Milwaukee, Wisconsin, who is General Chairman of the Convention and Congress.

Dr. Chas. E. Bayan of Randolph County recently moved to Pontiac, Michigan.

Maj. Lincoln Humphreys, M. D., Surgeon, U. S. Navy, stationed at Parris Island, S. C., recently visited his mother in Little Rock.

Dr. G. A. Warren of Black Rock, was a recent visitor to Little Rock.

The Sixth Annual Kansas City Fall Clinical Conference will be held in Kansas City, Missouri, October 9, 10 and 11, 1928. In October 1928 the Inter-State Post-Graduate Medical Assembly of North America will hold in Atlanta, Georgia. The Southern Medical Association will meet in Asheville, N. C., November 12-15, 1928.

Dr. W. B. Center has moved from Norphlet to Wink, Texas.

Dr. S. J. Albright of Searcy is attending the clinics at New Orleans.

Dr. H. A. Dishongh is now associated with Dr. M. E. McCaskill, office 711 West Capitol Avenue, Little Rock.

Dr. J. M. Muse, of Conway, who was injured recently in an automobile accident has returned home for convalescence. He has been under treatment at a Little Rock hospital.

Pope County Medical Society elected the following officers for 1928: President, H. S. Drummond; Vice-President, G. C. Webb; Secretary-Treasurer, W. P. Scarlett; Delegate to State meeting, Jerome Wright; Alternate, H. S. Drummond.

The Kansas City Alumni Chapter Phi Beta Pi medical fraternity will hold its Founders Day Dinner Dance at the President Hotel, Kansas City, Missouri, Saturday, March 10, 7:00 p. m. Dr. Lawson G. Lowrey, Supreme Secretary, will be present as well as other prominent representatives of the fraternity. Following the dinner there will be dancing in the Congress Room of the hotel.

Every member of the Phi Beta Pi Fraternity in the State of Arkansas is cordially invited to be present.

The American Medical Association, at its June meeting this year, will readjust the apportionment of delegates. Every county secretary is urged to make extra effort to forward his report for 1928, as early as possible, and try to include every eligible and desirable physician in his community. We trust that our enrollment will not show a decrease compared with last year.

IN MEMORY OF DR. J. M. PHILLIPS

To the Members of Saline County Medical Society:

We, your committee on resolutions on the life of our late brother, Dr. John Morgan Phillips, beg to report as follows:

We find that Dr. Phillips was born in Georgia, and that he had been in the practice of medicine for 39 years; the last 25 years having been spent in Benton. He was a graduate of Little Rock and St. Louis Medical Schools, and took a post-graduate course in Chicago. He was always a leader in everything pertaining to the advancement of his profession, taking an interest in all State and local organizations and all organizations that had to do with protecting the health of his friends—the public. He had served as President of the Saline County Medical Society and was Secretary at the time of his death. Served one year on the examining board of the State Medical Society and served as County Health Officer.

He was always courteous and agreeable in all meetings and association with his brother practitioners, and there is no doubt but that his store of useful knowledge has been drawn upon by quite a number of Saline County physicians, to the credit of the profession and restoration to health of suffering humanity.

Whereas, we find that on October 19, 1927, after four weeks of illness following a stroke of paralysis, the Angel of Death visited the home of our late friend and brother, and claimed all that was mortal of him of whom we write:

Therefore, Be It Resolved, That in the death of Dr. Phillips, the Saline County Medical Society has lost a worthy member, Benton a good citizen and the home a loving father and devoted companion, and in this, the dark hours of grief and distress, we offer our sympathy to the family of our deceased friend.

Dewell Gann, Sr.

J. D. Wright,

T. E. Buffington,

Committee.

MEASURES FOR THE PROTECTION OF HEALTH FOLLOWING THE MISSISSIPPI FLOOD

A report of more than usual interest relating to measures for the protection of health following the Mississippi flood, has recently been submitted to Congress by Surgeon General H. S. Cumming of the Public Health Ser-

vice. This report points out that the floods affecting the Mississippi River and its tributaries during the late spring and early summer of 1927 resulted in a far greater disaster from an economic point of view than that which occurred in Florida. In fact, it is the opinion of those who visited this region that the economic losses and human suffering in the flooded area exceeded those in any previous disaster in the country. Moreover, the dangers to the health of the citizens of the region was such as to require emergency aid from Federal, State and local health authorities as well as volunteer agencies, including the American Red Cross. On request of Secretary Hoover, acting chairman of the committee appointed by the President to co-operate with the Red Cross in emergency relief work in the area of the Mississippi Flood, an officer of the Public Health Service, was detailed to serve at the national disaster relief headquarters of the American Red Cross at Memphis, Tennessee, as liaison officer between the Red Cross organization and the national and State public health officials. This officer was enabled to determine from the health officials in the flooded area their most urgent needs as to public health personnel and to secure the necessary assistance from National, State, and local health agencies, official and unofficial throughout the country. Urgently needed biologic products, including smallpox vaccine, anti-typhoid vaccine, and antitetanic serum, were supplied in large quantities through these agencies.

Within a period of ten days from the beginning of the flood emergency, fourteen officers of the Public Health Service, trained in emergency work and familiar with the localities affected by the flood, were in the field to assist the State health authorities. On these men the State health officials placed their main reliance for assistance in the organization and general supervision of emergency work for the prevention of the spread of epidemic diseases.

The response of local and unofficial agencies to the appeal of the Public Health Service for trained personnel was immediate and generous, and resulted in meeting the important public health needs of the flooded area within a comparatively short time.

With the recession of the flood and the return of the temporary personnel to their respective organizations, the need arose for the development of a plan for providing public health protection to the inhabitants of the de-

vasted areas during the period of rehabilitation. Such a plan was accordingly developed at a conference of Public Health Service officials, State health authorities and representatives of the American Red Cross, and the Rockefeller Foundation, held in New Orleans, La., June 5, 1927. The plan, which provides for the establishment of county health units in the affected area through the co-operation of the United States Public Health Service and the Rockefeller Foundation with the State and local health authorities became effective July 1, 1927, and followed in logical sequence the emergency work performed by the American Red Cross. It was felt that by this means, assurance could be had that the spread of smallpox, trachoma, typhus fever and other epidemic diseases would be averted. In developing the preventive plan for operation during the period of rehabilitation, advantage was taken of the experience gained in the establishment and conduct of rural health work in other communities. In fact, it was observed that in the areas affected by the flood, that those counties which were provided with whole time efficient health service were able to meet the emergency needs promptly and efficiently. As a result of the demonstration of the value of these county health units in the flood emergency, it was evident that this method should be adopted and put into operation for the prevention of the spread of epidemic diseases and for the sanitation of the areas affected.

While the urgent emergency was met by the measures adopted, a serious public health situation will continue to exist until the damage done by the flood has been remedied. The people in this area will be exposed for an indefinite period to adverse health and economic conditions. The damage to the water supply and waste disposal systems and the curtailment of adequate food supply are likely to give rise to conditions adversely affecting health. Inquiries made since the flood indicate the increased prevalence of pellagra in certain portions of the flooded area. While this situation is attributable not alone to the flood but to the partial failure of crops, there is every likelihood that the adverse conditions brought about by the flood will increase the prevalence of pellagra, as well as of certain other diseases. Such aid as is possible is being rendered in these communities for the prevention of the spread of epidemic diseases and for the suppression of diseases due to adverse economic conditions. In the consideration of legislation to aid in

the rehabilitation of this vast area, account should be taken of the health needs and sufficient appropriations provided therefor.

CLINICAL LABORATORY SERVICE IN THE UNITED STATES

Statement by the Council on Medical Education and Hospitals

During the last decade there has been much discussion in medical and laboratory journals, and particularly on the platform, of medical and laboratory conventions, regarding the status of the clinical laboratories of the country. Especially it was regretted that the practice of clinical pathology, regarded as one of the medical specialties, had fallen into disrepute. The fact was lamented that the laboratory work had fallen into the hands of lay technicians and become the toy of persons who had a purely commercial point of view and very little training for the work. Much disgust and quite a strong note of despair was sounded by those few members of the medical profession who had championed the cause of clinical pathology and had adopted that specialty as a life work.

Many letters were received at the office of the American Medical Association from practitioners of pathology and leaders in medicine, regretting the drift toward lay commercialism, and urging that something be done to counteract it. What to do about it was a question. Organizations of chemists were interested because some of their members ran laboratories. Likewise organizations of clinical pathologists, bacteriologists, and of the medical profession were equally interested. Some of these organizations working alone undertook to investigate and to standardize the practice of clinical pathology, hoping to check the drift of that practice into the hands of technicians and restore it to its rightful place as a medical specialty.

The efforts of those organizations working single handed were of little or no avail except to emphasize the enormity of the task and the necessity for co-operation.

CO-OPERATION EFFECTED IN 1923

The necessary co-operation of the laboratory and medical organizations was brought about in 1923 at the annual meeting of the American Medical Association in San Francisco. At that time, delegates sent by the

American Chemical Society and the American Association of Pathologists and Bacteriologists separately petitioned the American Medical Association to establish some supervision over clinical laboratories. This led to the appointment of three committees representing the American Chemical Society, the American Association of Pathologists and Bacteriologists, and the Council on Medical Education and Hospitals. At a joint meeting of these committees in Chicago early in 1924, after much deliberation, certain basic principles underlying sound laboratory service were agreed upon which stressed specially a qualified bona fide director as the prime essential. The joint committee agreed that the work could best be conducted by the Council on Medical Education and Hospitals.

The first steps were: (a) to secure a complete list of laboratories in the country; (b) the preparation of a schedule of essentials in an approved clinical laboratory, and (c) the preparation of a questionnaire by which the essential facts regarding each laboratory could be obtained. Each of these measures was carried out with the advice and co-operation of fifty or more clinicians and others expert in laboratory work, including the committeemen of the above named organizations, and by the officers of the American Society of Clinical Pathologists which very early showed an interest and from which the Council has received a hearty co-operation.

After being revised and adopted by all parties interested, the questionnaire was mailed to all the laboratories of the country and a most hearty response was received. A complete report of the survey, "Essentials of an approved Clinical Laboratory," and a preliminary list of laboratories which appeared to be fully complying with those "Essentials," were published in the Hospital Number of the Journal for April 3, 1926. The facts as published were submitted to the House of Delegates of the American Medical Association at the Dallas session in 1926 and approved by that body.

To assist in giving as fair consideration as possible to each application for approval, a strong committee of laboratory experts was formed in every State or section of the country. Those committees aggregate one hundred and twenty individuals representing, as equally as possible, the co-operating organizations and hence the interests of the laboratory

profession. Under the direction of the Council, each committeeman makes his investigation and renders his report or advice independently of other committeemen in the same district.

At the present time, of the three hundred and fourteen laboratories that have reported, one hundred and fifty-one, after careful investigation, have been placed on the approved list and other applications for approval are constantly being received.

The Council lends all possible assistance to laboratories whereby they may become eligible for admission to the accepted list. Every laboratory that makes a report and signifies a desire to conform to the requirements, is informed in regard to any deficiencies. The spirit of this movement all the way through is constructive. Anyone who knows the condition of the laboratory field at the time this survey was begun, would not expect very telling or spectacular results to be shown by this time; nevertheless, there are ample reasons for believing that actual improvements are being made: (1) a number of laboratories formerly run by technicians and only nominally under "medical" directors, have come under the ownership and actual control of clinical pathologists of high professional standing and ripe experience; (2) a number of laboratories under the control of technicians have gone out of business; (3) the "Essentials" have been published repeatedly and thus brought to the attention of all persons working in the field of clinical pathology; (4) there is an increased demand for pathologists to man the clinical laboratories of the country; (5) the director of the Mayo Foundation says that the salaries offered the pathological graduates of the Foundation are double those offered to other graduates of the Foundation; (6) the feeling of unsteadiness indicated in the discussions of a few years ago has subsided to a considerable degree, and there is more hopeful attitude on the part of the clinical pathologists themselves.

FUTURE OUTLOOK

The movement is still in its beginning, but a good start has been made. To what extent doctors have actually discontinued sending specimens to unapproved laboratories and are sending them to approved laboratories is not known. The educational results, however, are becoming increasingly evident. In order to secure the best analyses for the benefit of their

patients as well as to best conserve the interests of the medical profession, physicians should refuse to have their work done at laboratories conducted under the direction of non-medical individuals. Much depends, also, on the continued hearty support of the various organizations and individuals who operate in the laboratory field. That this is already assured is indicated by the promptness with which laboratories are filling out and returning the form that has recently been mailed out by the Council on Medical Education and Hospitals for a complete and needed resurvey of laboratory service. The resulting data from this survey, will be published for the benefit of all. Of course, any laboratories that are not yet on the list, will be promptly considered for approval, if they express such a desire.

Communications

UNIVERSITY OF ARKANSAS
School of Medicine, Office of the Dean

Little Rock, January 24, 1928.

Dr. Wm. R. Bathurst, Editor,
Journal of the Arkansas Medical Society,
Little Rock, Arkansas.

My Dear Doctor Bathurst:

It is my wish to call the attention of your readers to the fact that a supreme effort will be made in the next Legislature to place the Medical School of the University of Arkansas upon a better footing. I think the situation is well known to the profession of the State. The institution has been hampered for lack of funds. It is being housed in the Old State House through the indulgence of the authorities. This is in no sense the proper place for a medical school. The place is old, dangerous from the standpoint of fire and impossible to heat during the cold season.

The two departments of the Medical School are separated one from the other, the first two years being given in the Old State Capitol Building, the last two years in the Isaac Folsom Clinic, the old College building, at Second and Sherman Streets. This works a hardship upon those who are doing the teaching, making it necessary to go from one building to another to perform the duties necessary to carry on the work. Notwithstanding this fact

the Medical School has carried on. I think, by reason of the fact that it has maintained the standard expected by friends, it is entitled to all the assistance the profession can now offer.

It is the purpose of those in control of the Medical School to meet the requirements of the American Medical Association by constructing a Charity Hospital. The rules of the Association are that every "A" grade medical school shall have control of a hospital for teaching purposes. This has been found to be absolutely essential to carry on "A" grade work. The Association, desiring that the Medical School shall have every opportunity to comply with these requirements, have from year to year extended the limit of time to be given for carrying out this purpose. The patience of the American Medical Association is about exhausted.

The profession of the State must realize the fact that they must come to the aid of their school in the sense of assisting in creating a public sentiment that will enable the Legislature to pass such an act as will create a State Charity Hospital that will care for every form of ailment to be treated in a State institution. This is not the time for internal dissension. It is the time when all men should forget their differences and get together for one common purpose.

I am enclosing a copy of the last message of Governor T. C. McRae, who was a sterling friend and still is an ardent advocate of the Medical School and a State Charity Hospital.

Very sincerely yours,

Frank Vinsonhaler, Dean.

January 20, 1928.

Dr. Frank Vinsonhaler,
War Memorial Bldg.,
Little Rock, Arkansas.

Dear Doctor:

I am sending you herewith a copy of my last message to the General Assembly and refer you to pages 21 and 22 as to my recommendations for the medical school and State General Hospital.

Several times before this I made reference to these matters, but this contains about all I recommended.

I sincerely trust that you will succeed in having both of these established and thoroughly equipped.

Yours truly,

(Signed) Thomas C. McRae.

STATE GENERAL HOSPITAL

One of the most important measures ever adopted by the General Assembly was in 1917, providing for a State General Hospital and for the free treatment of the sick, poor, injured and crippled persons of the State. In my opinion, the time has come when the State of Arkansas can no longer withhold its aid from the thousands of poor, worthy sick persons who could be cured, or benefited and restored to their economic efficiency by hospital care and treatment.

The erection of a State General Hospital, to be operated in connection with the medical school, and under the supervision of the University trustees, would place Arkansas in the rank of those States which have already taken this forward step. There are, in every county of the State, some poor persons unable to pay professional fees, and who are a burden to their communities. Some of them are in the county hospitals, with the poorest facilities. But few of the counties can provide proper hospital treatment for their helpless sick, and the only door of hope for such unfortunates is a State Hospital. Such hospital would relieve the counties, care for the poor and sick, and would also solve the clinical requirements of the medical school, for students would receive their training in the hospital under the direction of the teachers of the medical school. It would also afford opportunities, not now obtainable in the State, for physicians to take post-graduate courses of study, and young women desiring to enter the practice of medicine would be trained in the medical school and in the wards of the hospital.

In order to meet the requirements of higher medical education, and to make of the medical school an institution worthy of the name, and one to attract the highest class of students:

I recommend that sufficient appropriations should be made for the erection of suitable medical school buildings and a State General Hospital and home for nurses in training.

I recommend that the State, with the consent of the various counties, agree to take over

all the county hospitals and poor-farms, and assume the care of the patients that may be in them and such as may hereafter become eligible for admission, each county being allowed to have its patients enter the State Hospital, and required to pay the just proportion of expense, as in the case of the State Tuberculosis Sanatorium, and that the property of the county hospitals be sold and the funds be used on buildings and equipment for the State Hospital.

Obituary

HENRY, HUGH H.—Dr. Hugh Henry of Camden, aged 49, died at his home of lobar pneumonia, January 21, 1928.

Dr. Henry was a graduate of the University of Nashville, Class of 1903. He was company physician for the Eagle Lumber Company at Eagle Mills for many years, moving to Camden three years ago. He was a former member of the State Board of Medical Examiners. Surviving are his wife and two children, Miss Elizabeth Henry and James Henry, all of Camden.

County Societies

SEBASTIAN COUNTY

(Reported by C. S. BUNGART, Secretary)

At the annual dinner meeting of the Sebastian County Medical Society on January 10, 1928, 7.00 P. M., Dr. Wm. R. Bathurst was guest of honor. Physicians from surrounding territory in Arkansas and Oklahoma attended.

A more stringent State law governing the granting of license to physicians is advocated by Dr. Bathurst, president of the Southern Medical Association, who explained his conception of an ideal medical practice act at the annual dinner that night at the Hotel Goldman.

He explained that the proposed bill would create a non-medical board, which would pass upon an applicant for a license to practice in

four subjects, anatomy, physiology, chemistry and pathology, before the applicant goes to the regular board for examination. A draft of this bill, he said, would be published in the Journal of the Arkansas Medical Society. The speaker also discussed the fostering of periodic health examinations, declaring that the public soon will demand protective advice from the physician.

Dr. J. S. Southard, retiring president, reviewed the activities of the Society during the last year, pointing out the examinations given the children not yet of school age under the auspices of the county society and the co-operation extended to the baby clinics.

Dr. Davis W. Goldstein, president-elect, discussed methods which may be used by the society in fostering relations with the associated professions, with the public and among the members.

A traveling bag was presented to Dr. Bathurst on behalf of the county society by Dr. W. G. Eberle, who also made the presentation speech. Musical program, Dr. A. Gilbert, Dr. Noble McCormack.

Dr. Goldstein announced the following committees: Practice, Dr. P. A. Riddler; Surgery, Dr. C. S. Holt; eye, ear, nose and throat, Dr. J. H. Buckley; obstetrics, Dr. I. F. Jones and radiology and urology, Dr. W. R. Brooksher, Jr.

Dr. Noble D. McCormick acted as toastmaster and arranged the program.

The following physicians had places reserved:

A. J. McCain, Springdale; G. H. Butler, Heavener, Okla.; J. J. Hardy, Poteau, Okla.; O. M. Bourland, Van Buren, J. L. Post, Altus; J. R. Crigler, Alma; W. L. Porter, Ozark; Dr. Coffman, Heavener, Okla.; B. D. Woodson, Poteau, Okla.; E. N. Fair, Heavener, Okla.; W. J. Hunt, Poteau, Okla.; R. F. Terrell, Stigler, Okla. O. J. Kirksey, Mulberry; J. C. Romery, Van Buren; J. M. Stewart, Van Buren; W. M. Head, Talihina, Okla.; Thos. Douglass, Ozark; S. P. McConnell, Booneville; Robt. McChurch, Stillwell, Okla.; A. T. Hill, Stigler, Okla.; J. M. Wallace, Fayetteville; B. L. Ware, Greenwood; S. P. Johnson, Roland, Okla.; D. C. Roberts, Fayetteville, C. W. Hall, Greenwood; W. R. Reves, Alma; Dr. Duff, Bradley, Okla.; J. R. Siegel, Clarks-ville; J. A. Wigley, Mulberry; S. C. Grant,

Mulberry; L. H. Callen, Fayetteville; A. S. Gregg, Fayetteville; Frank Rigall, Prairie Grove; Dr. Brandenburg, Mountainburg; T. M. Mitchell, Mountainburg; J. W. Walker, Fayetteville; A. A. Gilbert, Fayetteville; M. S. Dibrell, Van Buren; Geo. M. Love, Rogers; W. G. Ramsay, Quinton, Okla.; T. W. Collins, Muldrow, Okla.; A. L. Boen, Clarksville; B. H. Hawkins, Mena; B. L. Bennett, Van Buren; W. A. Moore, Rogers; L. J. Pinner, Gans, Okla.; C. S. Burns, McCurtain, Oklahoma; Earle Hunt, Clarksville; C. E. Benefield, Fort Smith; J. H. Benefield, Fort Smith; S. D. Bevill, Fort Smith; C. B. Billingsley, Fort Smith; A. A. Blair, Fort Smith; J. E. Blake-more, Van Buren; W. R. Brooksher, Fort Smith; J. H. Buekley, Fort Smith; C. S. Bungart, Fort Smith; Andre B. Carney, Fort Smith; A. S. Chapman, Fort Smith; St. Cloud Cooper, Fort Smith; H. C. Dorsey, Fort Smith; Walter Eberle, Fort Smith; E. G. Eppler, Fort Smith; J. A. Foltz, Fort Smith; M. E. Foster, Fort Smith; W. B. Freer, Fort Smith; Q. R. Galloway, Van Buren; L. Gardner, Fort Smith; J. S. Gregg, Fort Smith; John H. Harvey, Fort Smith; Arthur F. Hoge, Fort Smith; Chas. S. Holt, Fort Smith; Geo. F. Hynes, Fort Smith; T. E. Jeffery, Fort Smith; Hugh Johnson, Fort Smith; J. E. Johnson, Fort Smith; I. Fulton Jones, Fort Smith; C. H. Kennedy, Fort Smith; H. C. King, Fort Smith; C. E. Laws, Fort Smith; J. E. Little, Fort Smith; Giles Lueas, Van Buren; N. D. McCormack, Fort Smith; C. S. Means, Fort Smith; H. Moulton, Fort Smith; E. C. Moulton, Fort Smith; P. A. Riddler, Fort Smith; H. H. Smith, Fort Smith; J. D. Southard, Fort Smith; J. S. Southard, Fort Smith; E. H. Stevenson, Fort Smith; Eugene Stevenson, Fort Smith; R. T. Strange, Fort Smith; S. P. Stubbs, Fort Smith; J. M. Taylor, Fort Smith; H. B. Thompson, Fort Smith; Cons P. Wilson, Fort Smith; S. J. Wolfermann, Fort Smith; R. B. Wyatt, Fort Smith; D. W. Goldstein, Fort Smith; W. F. Rose, Fort Smith; Dr. McDaniel, Fort Smith.

It was a pleasure for Sebastian County Medical Society to honor one who has done so much for organized medicine.

BENTON COUNTY

(Reported by C. S. WILSON, Secretary)

The regular meeting of the Benton County Medical Society met in Rogers, January 12,

1928. Dr. J. L. Clemmer, President, in the chair.

Members present. Clemmer, Curry, Duekworth, Greene, Harrison, Highfill, Hodges, Hughes, Ireland, Koobs, Love, McNeil, Moore, Smiley, Scott and Wilson. Visitors. Dr. H. D. Wood, Fayetteville, Dr. T. L. Cooper, Elm Springs and Dr. A. F. Hoge, Fort Smith.

The following papers were read. "Business Methods of Physicians" by C. S. Wilson. Discussed by Drs. Koobs, Wood, Hoge and Moore.

"Appendicitis," by A. F. Hoge. This paper was much appreciated and discussed with interest by Drs. Wood, Smiley, Koobs, Moore and Hughes.

The next regular meeting will be held at Siloam Springs, the second Thursday in February, at 2.00 p. m. All visiting physicians will be welcome.

CRAIGHEAD COUNTY

(Reported by P. W. LUTTERLOH, Secretary)

The first meeting of the new year of the Craighead County Medical Society was held January 21, in the dining room of the Arkansas Hotel.

In the absence of the retiring president, Dr. S. W. Moreland, his address was read by Dr. Horner. In his paper, Dr. Moreland emphasized the need for more drastic laws in handling poor accounts; the need for legislation that will reimburse the physicians handling a large charitable practice, also a more co-operative spirit among the profession at large.

A number of out-of-town physicians were present, as well as the members of the dental profession. The society hopes that the coming year will find both the dental profession and the medical profession co-operating towards making the year's program mutually interesting and instructive.

Hon. Roy Penix gave an address on "The Laws That Concern the Medical Profession."

Suggestions from all the doctors present were offered as to how the society should formulate its program this year. It is hoped that from these outlines the program for the year will be so planned that it will attract all the members to the meetings.

Dr. Thad Cothorn, retiring secretary, was reported seriously ill in a Memphis hospital. A committee was appointed to draft resolutions of appreciation for the faithful service rendered by him while acting as secretary.

A eulogy on the death of Dr. L. D. Horn of Egypt was presented and read to the society with instructions that it be sent to the family, with a copy to the journal of the Arkansas Medical Society, as an expression of the esteem in which the doctor is held by the society's membership.

Dr. H. A. Stroud, assisted by other local physicians, will begin a complete examination of all school children of Jonesboro, particular attention being paid to incipient tuberculosis and infections of the eye, ear, nose and throat.

The next meeting of the society, February 2, the local dental society will entertain the Craighead County Medical Society at dinner at the Noble Hotel, followed by a program.

EULOGY TO DR. L. D. HORN

The untimely death of Dr. L. D. Horn of Egypt, is a great loss to the community in which he had spent his life, and to our County Medical Society, he was a prominent figure in the healing art in this region and enjoyed a vast host of friends by virtue of his untiring devotion to his profession, his love for his people, and his broad tolerance.

Dr. Horn had a large circle of friends who admired his ability and respected his integrity. His passing leaves a gap in the lives of his people in and about Egypt that will be hard to fill.

As a faithful member of our County Medical Society, Dr. Horn was well-known and loved, in spite of his years along with the distance to travel to our monthly meeting, when he was not attending his practice, Dr. Horn was always on hand to bless us with his wholesome presence. In brief, there passed with him an able physician, a true, upright, God-fearing gentleman—a true man among men.

As a member of the Craighead County Medical Society, to have known one good, old man, who through the chances and mischances of a long and devoted life, has carried his heart in his hand, like a palm branch, weaving all discords into tranquillity and peace helps our faith in God, in ourselves, and in each other more than any sermons.

This man we must look upon and love for Dr. Horn in his life among us was just such a man. So we, as members of the Craighead County Medical Society, mourning with his family and his people, in a small way pay homage to him, our beloved member who has passed from our midst, leaving a life that was marked with toil

and hardship that his fellowmen might be helped not only physically, but spiritually, by his skill and his devotion to his profession and his God. His love for all that was good and wholesome along with his faithful service to those in need, marked indelibly upon the scroll of medical service the name of Dr. Horn, whom we all loved and mourn as a true disciple of all that constitutes the practice of that great science, Medicine.

For the Craighead County Medical Society.

W. W. Jackson,
W. C. Haltom,
P. W. Lutterloh,
Committee.

CRAIGHEAD COUNTY

(Reported by P. W. LUTTERLOH, Secretary)

The Craighead County Medical Society held its regular monthly meeting at the Noble Hotel, Jonesboro, February 2, 1928, some twenty doctors and dentist enjoyed the banquet and program furnished by the dentists of the county. Dr. Stroud, President, being ill, Dr. Elders of Harrisburg, presided.

Under the direction of Dr. H. A. Stroud, the doctors and dentists of Jonesboro have been conducting examinations of all school children in the city. Many interesting cases have been brought to light during this survey.

Dr. H. J. Green, Paragould, emphasized the need of closer co-operation between the doctors and dentists, especially related to the diet of the expectant mother.

Dr. McCurry, read a paper on "The Dentist, a Necessary Blessing." This paper has been sent to the Journal of the Arkansas Medical Society for publication.

The society is planning on entertaining Dr. Jerold B. Webb of Colorado Springs, past president of the International Tuberculosis Association, about the 28th of February. All doctors of adjoining counties will be invited to hear Dr. Webb while in Jonesboro.

Dr. Thad Cothorn, past secretary, who has been ill, is again back in harness.

The future promises some interesting programs for Craighead County and one hundred per cent attendance is urged.

CARROLL COUNTY

(Reported by J. F. JOHN, Secretary)

The Carroll County Medical Society met at the Huntington Hospital, Eureka Springs, January 14, 1928.

Present: Henry, Pace, Kemp, Bohannon, Webb and John.

The following officers were elected for 1928: President, J. H. Bohannon, Berryville, Secretary, J. F. John, Eureka Springs.

It was voted to hold monthly meetings, with a scientific program each meeting.

The next meeting will be held in Berryville, February 15.

JEFFERSON COUNTY

(Reported by J. C. BEARD, M. D., Secretary)

The Jefferson County Medical Society held its annual banquet at the Hotel Pines, December 6, 1927, President Palmer in the chair.

Present: Cunningham, Gurney, John, Hankinson, Woodul, Luck, Caruthers, Lemons, Power, Hughes, Lowe, Higginbotham, Shelton, Smith, Capel, Gill, Palmer and Beard.

Several members reported interesting cases. The outgoing president delivered an interesting valedictory and the secretary read a brief resume of the activities of the year.

Officers elected for 1928. President, O. C. Hankinson; Vice-President, B. D. Luck; Secretary, J. C. Beard; Delegate, J. T. Palmer; Alternate, J. M. Lemons.

Several members expressed the opinion that 1927 had been one of the most successful and amiable years in the history of the society. It was the consensus of opinion that the society would be benefited, the meetings would be more interesting, and the attendance would be higher if an out-of-town man came in occasionally and read a paper and told how they were doing things elsewhere.

The food was well served and everybody seemed to enjoy the "get-together."

TULAREMIA

The etiology of tularemia has been definitely established as an organism, *Bacterium tularensis*. In nature the disease affects jack rabbits, snowshoe rabbits, and cottontail rabbits. This provides a reservoir for infection of both wild animals and human beings. No cases have yet been recognized in commercial rabbitries, and care should be exercised to avoid the introduction of tularemia into such places. There is no danger of contracting the disease from eating rabbit meat if it is thoroughly cooked, even though the animal may have been infected.

In the Western States the disease is carried from animal to animal and from animal to man by the bites of infected deer flies and ticks. Ticks also act as carriers in the Southern States. Men also become infected by handling rabbit carcasses, in dressing them for the table or cutting them up to use as food for animals or bait in fishing or trapping.

For protection against tularemia the best known precaution is the use of rubber gloves when handling or dressing rabbits, or when skinning other animals that may be infected with the disease. In the open it is wise to exercise care in avoiding the bites of deer flies, ticks, or other possible carriers. Wearing rubber gloves is not an absolute protection, for skilled laboratory workers who are scrupulously careful because they are aware of the dangers, often contract infection. Rubber gloves should be worn in handling fresh skins. Dried skins are not likely to carry infection. One attack of tularemia confers immunity to man, hence those who have recovered from the disease should be employed wherever possible in occupations where there is risk of infection. As yet no protective vaccine has been developed.

In addition to the wild rabbits most affected by tularemia, and man who may contract the disease, scientists have discovered cases of tularemia in California ground squirrels, Columbia ground squirrels, Utah ground squirrels, desert ground squirrels, pine squirrels, yellow-bellied chipmunks, pocket gophers, woodchucks, opossums, cats, porcupines, house mice, deer mice, meadow mice, wood rats, and coyotes, and susceptibility is being investigated in other animals. All possible carriers of the disease should be handled with care.

In the man tularemia is likely to manifest itself first by pain, tenderness, and a swelling of the lymph glands draining the region where the infection occurs, as those of the elbow or armpit when infection has occurred on the finger. These symptoms are likely to develop within two to five days after infection. An inflamed and painful ulcer may soon appear where the insect bite occurred, although in some cases this does not happen. The development of the disease is likely to be accompanied with sudden onsets of headache, aching pains, chills, prostration, general weakness, and fever.

Book Reviews

Principles of Chemistry.—An introductory Textbook of Inorganic, Organic and Physiological Chemistry for Nurses and Students of Home Economics and Applied Chemistry, with Laboratory Experiments. By Joseph H. Roe, Ph. D., Professor of Chemistry, George Washington University Medical School. Illustrated. Published by the C. V. Mosby Company, St. Louis. 1927. Price, \$2.50.

The author states that this book has been written to meet the requirements of a course in chemistry for nurses recently recommended by the National League of Nursing Education. The application of chemistry to biology, medicine, and the arts has received special emphasis.

Tiger Trails in Southern Asia.—By Richard L. Sutton, M. D., Sc. D., LL. D., F. R. S. (Edin.) Fellow of the Royal Geographical Society; Professor of Dermatology, University of Kansas; Special Representative, Department of Natural History, University of Missouri. 115 Original Illustrations. Published by The C. V. Mosby Company, St. Louis, 1926. Price, \$2.25.

This book contains much first-hand information of a tiger hunt, and was written entirely for pleasure and gives the reader an equal amount of pleasure and fascinating interest. It also presents a study of the native tribes, together with a description of the character and habits of the fauna in Southern Asia.

Obstetrics for Nurses.—By Joseph B. DeLee, M. D., Professor of Obstetrics at the Northwestern University Medical School; Obstetrician to the Chicago Lying-In Hospital and Dispensary. New (8th) Edition, Revised. 12mo of 635 pages, with 266 illustrations. Published by W. B. Saunders Company, Philadelphia. 1927. Cloth, \$3.00 net.

In this new edition, Dr. DeLee has included all the new developments in obstetrics that particularly concern nurses. Only the established facts and practices are presented.

Our Surroundings.—An Elementary General Science. By Arthur G. Clement, Formerly New York State Supervisor of Biologic and General Science, Morton C. Collister, Principal of Baldwin High School, Baldwin, N. Y. and Ernest L. Thurston, Formerly Superintendent of Schools, Washington, D. C. Published by The Iroquois Publishing Company, Inc., Syracuse, New York.

Each of the forty-five chapters of this book covers a definite topic, as Water, Heat, Magnetism, Respiration. Fundamental laws and principles are emphasized at the right point and to the proper degree.

Diseases of the Skin and Syphilis.—A Textbook, Designed for the Use of Students and Practitioners. By Albert Strickler, M. D., Professor of Dermatology and Syphilology, Temple University Department of Medicine. With 218 illustrations, Including 6 full page plates, some in colors. Published by F. A. Davis Company, Philadelphia. 1927. Price \$8.00 net.

The author of this book is an experienced teacher, which has prepared him to present a useful book on dermatology. He has endeavored to subdivide the facts relating to each disease, under the following captions: eruption, description, progress, distribution, subjective and objective symptoms, etc., making it more comprehensible and systematic.

The New Medical Follies.—An Encyclopedia of Cultism and Quackery in These United States, with Essays on The Cult of Beauty, The Craze of Reduction, Rejuvenation, Eclecticism, Bread and Dietary Fads, Physical Therapy, and a Forecast as to the Physician of the Future. By Morris Fishbein, M. D., Editor of the Journal of the American Medical Association and of Hygeia. Published by Boni and Liveright, New York, 1927.

The author of this book is one of the most active figures in the medical profession. The useful results of his many activities have been a broadening of the mutual interest of the physicians and the laity.

The contents of Dr. Fishbein's "New Medical Follies" are as follows: I. An Encyclopedia of Cults and Quackeries. II. The Cult of Beauty. III. The Craze for Reduction. IV. Rejuvenation. V. Rejuvenation: The Mechanical and Glandular Methods. VI. Bread and Some Dietary Fads. VII. The End of Eclecticism. VIII. Physical and Electric Therapy. IX. Psychoanalysis—A Cultist Movement? X. Ethics—Medical and Otherwise. XI. The Physician of the Future.

The Surgical Clinics of North America —(Issued serially, one number every other month.) Volume 7, Number 1 (Cancer Number—February, 1927.) 235 pages with 153 illustrations. Per clinic year February, 1927 to December, 1927.) Paper, \$12.00; Cloth, \$16.00 net. Published by W. B. Saunders Company, Philadelphia.

Two interesting contributions in this number are by W. Simpson Handley, Surgeon to the Middlesex Hospital, London, on "The Origin of Bone-Deposits in Breast Cancer," and the other, John Berton Carnett, Philadelphia, on "Scirrhus Carcinoma of Breast with Extensive Metastases.

Book Reviews (Continued)

Overcoming Tuberculosis.—An Almanac of Recovery. By Gerald B. Webb, M. D., Consulting Physician, Cragmor, Glockner, Sunnyrest and the National Methodist Episcopal Snaatoria; Former President, National Tuberculosis Association; President, Colorado School of Tuberculosis, Colorado Springs, Col., and Charles T. Ryder, M. D., Colorado School of Tuberculosis, Colorado, Third Edition Revised. Published by Paul B. Hoeber, Inc., New York. Price, \$2.00

This book is written by two of our leading physicians that confine their study to tuberculosis. Authoritative information is given in a clear and hopeful style, and should be in the hands of every tuberculosis patient.

Authors advice may be useful in other conditions. We quote, "Be patient, be cautious, be serene. Consider your exile temporary, and spare no pains and sacrifice to bring it to a happy end. Never lose interest in life, for life loves those who love her."

How to Make the Periodic Health Examination.—A Manual of Procedure. By Eugene Lyman Fisk, M. D., Medical Director, Life Extension Institute and J. Ramser Crawford, M. D., Assistant Medical Director, Life Extension Institute. Foreword by Major General Merritte W. Ireland, Surgeon General, United States Army. Published by The Macmillan Company, 1927.

This volume is presented to the medical profession with the anticipation that it will fill the need for a practical manual of procedure to serve as a guide in the conduct of examination of those in apparently good health.

International Clinics.—A quarterly of Illustrated Clinical Lectures and Especially Prepared Original Articles. By Leading Members of the Medical Profession Throughout the World. Edited by Henry W. Cattell, A. M., M. D., Philadelphia. Volume II. Thirty-seventh Series, 1927. Published by J. B. Lippincott Company, Philadelphia.

Among the several interesting features of this issue of the Clinic, we wish to refer to a very common ailment, namely: "Bunion—Its Cause and Cure" by Dr. Robinson, Kenosha, Wisconsin. He defines bunion as a dislocation of the metatarsophalangeal articulation of the great toe. He shows illustrations to

show a real case before and after operation. And advises, never to operate one foot, but always both, even though one may be very small and not cause much trouble, for after operation on one foot it will take a narrow tight shoe and the patient cannot stand a tight shoe on the one not operated, so the feet would be mismated. It may sound strange to say, wear shoes day and night, but it is the thing to do if you want the nicest possible results, but if it is comfort alone and the patient does not care for cosmetic results, then it is not necessary. The shoes should be removed each morning and night and the feet sponged off with cool water and soap and then dried and fresh stockings put on and the shoes replaced.

Potassium and Tartrates.—By Ralph W. Webster, Ph. D., M. D., Professor of Medical Jurisprudence in University of Chicago (Rush Medical College) Chicago. With a Digest and Bibliography of the Literature. By W. A. Brennan, A. B. Published by the Commonwealth Press, Chicago. 1927. Price, \$2.50 net.

This book gives a complete digest of the literature on these subjects. It will serve principally as a valuable reference.

Heart and Athletics.—Clinical Researches upon the Influence of Athletics upon the Heart. By Dr. Felix Deutsch, Privatdocent in Internal Medicine at the University of Vienna; and Dr. Emil Kauf, Assistant at the Heart Station in Vienna. English Translation by Louis M. Warfield, A. B., M. D. Published by The C. V. Mosby Company, St. Louis, Missouri. Price, \$2.50.

The material supplied in this book has been planned with the idea of presenting valid directions for formulating an opinion, concerning the hearts of those who engage in athletics, either for pleasure or competitive athletics.

The authors show that among the various types of exercise which place the greatest strain upon the circulatory apparatus and therefore most readily lead to changes in the heart, rowing bicycling, and skiing stand at the top, while boxing, football and fencing hardly ever give rise to cardiac enlargement. Between these stand swimming, hiking, light and heavy athletics. Further, proofs are furnished by case records that the heart changes can be the result only of dilatation.

Important Announcement

IT is with pleasure that the Abbott Laboratories announce the purchase of the business, good will, equipment and products of John T. Milliken and Co., of St. Louis, manufacturers since 1894 of reliable pharmaceutical preparations.

It will be the policy of the Abbott Laboratories to continue the manufacture of the Milliken line and to maintain the present high standard of purity.

The research staff and facilities of both the Abbott and Milliken firms will continue to be devoted to the development of "The Best Pharmaceutical Products of Today and the Better Products of Tomorrow."

This notable addition to the service of the Abbott Laboratories became effective January 3rd, 1928.

Orders for Milliken preparations will continue to be filled promptly from the St. Louis address, or orders may be sent to the home office of the Abbott Laboratories at North Chicago. Our branches as well as the wholesale and retail drug trade will be stocked with the Milliken Specialties as soon as possible.

EXECUTIVE OFFICES

ALFRED S. BURDICK

PRESIDENT

ABBOTT LABORATORIES

NORTH CHICAGO, ILL.

THE JOURNAL

OF THE Arkansas Medical Society

PUBLISHED MONTHLY UNDER THE DIRECTION OF THE COUNCIL

Vol. XXIV

LITTLE ROCK, ARK., MARCH, 1928

No. 10

Original Articles

THE PERICARDIUM*

S. F. HOGE, M. D., Little Rock

It seems that a brief review in the nature of an explanation is timely in bringing before you a clinico-pathological condition that apparently occupies so small a niche in the category of bodily disease. It is hoped that this may be the first step in a symposium on cardiac pathology. In reviewing the literature it seems that only the greater lights on the horizon of medicine give the subject serious consideration. It is inferred that the ancients recognized the condition from their post-mortem studies, but its etiology, physiology, pathology and morbid anatomy and clinical interpretation attracted little attention till 1648, when a surgeon by the name of Riolanus trephined the sternum and drained the pericardium. Strange as it may seem when considering the lack of present day technique the patient recovered.

The professional attitude of that day was on the contrary extremely modern and no sooner did the report appear in print than his confreres attempted to strip him of his rewards and attribute the first successful operation to Galen of many years before. In this they did not succeed. From then on to 1855 the literature is ominously silent on the subject. From then on to 1891 four or five authentic case reports appear in the literature. In 1900 interest was again revived and has grown until it now holds the attention no less than other more familiar serous surfaces such as the pleura, peritoneum, synovia and the meninges.

Osler (2), Barker, Cabot (4), Dock, Tice (5), Greene (3), and others have dignified this

clinical entity with the captions: "It is the most frequently over-looked serious condition that we encounter." "It is the most frequent undiagnosed clinical condition to be diagnosed at the post-mortem table."

Statistics show that no less than twelve per cent of pneumonias are complicated with pericarditis and that about one per cent is diagnosed in the living subject. That fully five per cent of old tuberculars carry the same complication and that only rarely is the diagnosis made except at time of post-mortem. That rheumatic cardiac conditions very frequently extend to and involve the pericardium. The expression of these men on this condition should particularly grip us, since they have drawn together the raw surfaces of error, sutured them with threads of experience and healed the wound with wisdom.

Knowing the vicissitudes of disease in life leaves us without an explanation, in many instances, unless we revert to that marvelous period of morphosis during uterine development. Believing further that frequency or infrequency of diseased states of certain structures is dependent, to a marked degree, upon not only developmental, but permanent anatomy, warrants a brief review of the particular structure with which we are dealing. This is especially true of the pericardium, since most of its infectious agents are brot to it through either the blood stream or the lymphatic radicals, or by direct contact with infection of adjacent tissues.

The first specialization of mesenchymal cells which later lead to the formation of the large vessels that twist into an "S" like figure and fuse and develop into the heart, are seen in the region of the visceral arches high in the neck. As these vessels grow they invaginate a thin film of tissue which acts as a covering and later assumes the architecture of the pericardium. In the truest sense, then, the heart is outside the pericardium. The portion of the

*Read before the Pulaski County Medical Society, January 23, 1928.

pericardium in contact with the heart fuses into the myocardium and is known histologically as the epicardium. The outer layer of the velum on the other hand fuses with the surrounding structures and is reinforced with a strata of fibrous tissue and is known as the parietal pericardium.

The space between the epicardium and the parietal pericardium is in reality the original serous surface of the invaginated velum, and true to its characteristics here as elsewhere it does not fuse. Like serous surfaces elsewhere it is a most efficient lubricated cushion which absorbs all friction of normal processes without being aggravated to adhesion formation. Under pathologic insults it may, and frequently does, put out all the essentials in the building of firm adhesions.

We are vitally concerned with the vascular and lymphatic supply of this structure as they are the avenues of entrance of most of the infections. The vascular supply to the pericardium comes from the internal mammary on the left, the intercostals and a small twig from the phrenic. The lymphatic system because of its embryologic development is in communication with the tracheo-bronchial tree, the mediastinal nodes, the twigs from the hilus of the lungs, the dome of the diaphragm and those along the thoracic aorta. The lymphatics of the myocardium play a minor role in the dissemination of infection since they are well hidden beneath the epicardium.

With this brief review of the embryology and anatomy of the pericardium we can develop the various lesions with a much clearer understanding. The frequent involvement in upper respiratory infections is much more easily explained. The frequency of pericarditis in rheumatic conditions are not so obscure. The fact that 12 per cent of the pneumonias are associated with an inflammatory condition of the pericardium is not surprising. That endocarditis rarely causes pericarditis is more to be anticipated than encountered. That pleural empyema can long exist without pericarditis is but a natural cause and effect.

The histopathology of an inflammation on the serous surface of the pericardial sac is entirely analogous to serous inflammations elsewhere. The bacteria, or other causative agent, lodges in the vascular capillaries or in the lymphatics. As the organisms grow they destroy at least a few of the surrounding cells. This liberates a cytotoxic substance that sets aflame the reactive changes. The capillaries

temporarily contract, the glistening lubricated surface gets dull, friction increases, the nerve ends are irritated, the patient may complain of pain and a rub may be heard over the pericardium.

The condition may be permanently arrested at this stage or carry through to an entirely different picture. With the relaxation of the capillaries the blood rushes through spilling serum through the walls into the interstitial tissue spaces. The erythrocytes leave the capillaries by diapedesis while the white cells emigrate. The nomadic phagocytic cells, which are sessile and found throughout the body, mobilize in great numbers. They may be seen slipping along between the fixed tissue cells ready for defense. If we visualize the area at this stage the five cardinal findings of an inflammation will be evident; *i. e.*, rubor, tumor, calor, dolor and partial function lesion.

The body resistance may be such that the condition goes no further, but subsides leaving the familiar milk plaque on the pericardium as mute evidence of the reaction. The invading agent may surpass the tissue resistance and provoke a distinct, yet variable and definite change. The fluid part of the tissue may exude as a transudate and accumulate in the pericardial sac yielding the clinical condition known as a serous or hydro pericarditis. This same serum may be activated by the hormone, thrombokinase and coagulate producing fibrinous or plastic pericarditis. The spiral-like motion of the pulsating heart should throw the fibrinous exudate into waves or ridges giving the familiar picture of the rough, shaggy heart. If the parietal pericardium is glued to the epicardium and then torn free the picture is that of the bread and butter heart. Should the cemented surfaces become organized into adhesions, we have the adhesive pericarditis. Should the adhesions be more or less generalized, we have the obliterative pericarditis. Should lime salts be precipitated in this bed of fibrous tissue, there is formed the calcified pericarditis.

When the liquefactive cytotoxins or enzymes are liberated and activated, the bacteria, nomadic and fixed cells undergo liquefaction necrosis, producing pus. Clinically, this is known as purulent pericarditis, and like purulent conditions elsewhere, it is of grave import. The usual organisms encountered are the streptococcus hemolyticus and non-hemolyticus, streptococcus rheumaticus, streptococcus erysipellus, the pneumococcus, the staphylo-

coccus, the gonococcus, the tubercle bacillus and possibly a few others. Should the organism be of the gas producing variety, in addition to the above purulent change, there may be the accumulation of gas, yielding the clinical pyo-pneumo-pericarditis. Should hemorrhage be evident as in tuberculosis and streptococcus it is spoken of as hemorrhagic pericarditis. These are not the only conditions of pneumo and hemorrhagic pericarditis as they are known to follow injury to the trachea or esophagus, rupture of a capillary or an aneurism, or be found in certain debilitating conditions, such as neoplasia, diabetes and nephritis, caries of the sternum or ribs, coronary thrombosis, etc.

From the clinical evidence of investigation it might be best to develop but two types, *i. e.*, the plastic and the effusive pericarditis. Any modification of these will naturally gravitate into their proper places. Sibson says that of the plastic type there are no constant and characteristic symptoms. They frequently go unnoticed or are overshadowed by the primary condition until revealed at the post-mortem.

To the alert there are many suggestive findings that weave into a diagnosis as surely as each thread of habit weaves into an unbreakable cable. Palpation reveals nothing, unless a thrill be present. Inspection and percussion reveal nothing unless the heart be enlarged, and, even then, there is little that is differential. Auscultation reveals the to and fro friction rub which is not in tune with the valve rhythm. It is very variable in time, intensity, audibility and synchronicity. It may be elicited only to fade out and reappear again. It is not transmitted along the flow of the fluid as are the valve lesions murmurs. The diagnosis rests for the most part on the general condition of the patient, the history of the condition, the presence of precordial pain or pressure, the to and fro sound over the precordium not in tune with the cardiac valve cycle and failing in the known directions of transmission.

In the effusive type of pericarditis the exudate or transudate failed to be absorbed or organized. It is divided, according to the solutions found, into serous, fibrinous, purulent, and hemorrhagic pericarditis. The clinical history in this condition is of much more import than in the dry pericarditis. The history may show a frank onset simulating endocarditis, pleurisy, pneumonia, or lower ab-

dominal crises, such as appendicitis, gall-bladder diseases or nephritis. On the other hand, it may creep on in an insidious manner without outstanding symptoms. Sensory disturbances are usually evident, and these may vary from mere pressure to sharp stabbing pain. Like the pleuritic pain, as soon as the effusion lubricates the dry surfaces it tends to disappear. As the condition grows worse dyspnea and orthopnea are evident. Distension of the veins in the neck may be marked. Pressure on the recurrent laryngeal nerve with its train of symptoms is not uncommon. A septic history is not uncommon.

Since many of these conditions are in children and adolescents there is little that may be gained from inspection and palpation except the disturbance of the apex impulse. Percussion should elicit definite findings. The cardiac dullness is increased and changed in outline. The narrowness of the base is broadened by the contained fluid and to the fact that the pericardium is loosely attached. The heart and contained blood being heavier than the fluid gravitates to the most dependent part while the fluid rises. Intra-thoracic pressure adds additional factors. During the earlier stages the cardio-hepatic angle is not disturbed, but as the fluid accumulates this is erased and Rotch's sign becomes evident. With a still further enlargement the jug shaped appearance of the cardiac dullness may be reversed, *i. e.*, base down and apex up. Skodaic resonance may be elicited in the left axilla, lower lobe of the left lung be compressed and yielding the findings of a passive congestion with a consolidation, except that rales are most frequently absent. The right lung may show compensatory emphysema. Auscultation will vary with the stage of the effusion. In the early stages the friction rub is quite constant, as the effusion increases it tends to disappear. This to and fro rub is rather persistent even though the heart is surrounded with fluid, since in its cycle it projects against the pericardium producing the rub. As the cardiac muscle weakens the rub fades.

The character of the cardiac sounds is of the utmost importance since they materially assist in differentiating between an enlargement of the heart and a pericarditis. In an enlargement of the heart the sounds are adulterated and diluted to such a degree that their precision and clearness is disturbed. A murmur, if present, is synchronous with the cycle of the heart. In effusion the cardiac sounds are dis-

tant, but there is little modification of their distinctness or purity. Should a friction rub be present it is out of tune with the cardiac cycle, and is rarely influenced by respiratory excursion.

The frequency of the findings in 118 cases recorded by Winslow and Shipley (1) are in part as follows: Enlargement of the precordial dullness, 90 times; rapid pulse, 59 times; quickened respiration, 41 times, distant and weak heart sounds, 50 times, elevated temperature, 58 times, enlarged and displaced liver, 16 times, epigastric pain and tenderness, 15 times, apex beat not palpable, 24 times, dyspnea, 50 times, friction rub, 26 times, leucocytosis, 13 times.

This data, which has been culled, would avail us very little unless it smoothed the way to a clearer understanding and the achievement of a correct diagnosis. A summary of the salient points may be stated seriatim.

1. Pear or jug-shaped precordial dullness.
2. Apex beat inside cardiac dullness.
3. Muffling or distancing of cardiac sounds without sacrificing clearness or distinctiveness.
4. Precordial to and fro rub even though transient.
5. Rotch's sign with obtusion of the cardio-hepatic angle.
6. Compression of lower lobe of left lung.
7. Frequent absence of cardiac impulse.
8. Roentgen-ray evidence most valuable.
9. Aspiration.

The treatment might at first seem hopeless, but fortunately this is not always the case. The mortality rate falls between forty and fifty per cent. Some of the apparently most extreme cases have recovered, while some that seemed mild have succumbed. It seems best to institute treatment along three rather distinct avenues. First, relief of the agony of the patient. Second, measures to combat infection, and, third, prevent cardiac failure. The best remedy for a patient in agony and approaching shock is morphia. This should be given in sufficient dosage to produce rest. Other adjuncts include an ice bag or hot water bottle over the precordium. Some times heat is preferable to cold and again neither may be followed with the slightest change.

As to the second premise, measures to prevent infection, little specific therapy is avail-

able. What we have is directed more to the primary condition than to the precordium per se. Most all drug therapy is empirical rather than rational. This includes the salicylates, iodides, alkalies, atropine, quinine and others. Counter irritants belong in the same category.

Cardiac stimulants such as digitalis, quinine, theobromine, caffeine, sodium benzoate and others; or general stimulants such as strychnine, camphorated oil and quinine may be of use.

Mechanical or surgical interference pertains for the most part to effusive pericarditis, since masterly inactivity is the treatment par excellence in plastic pericarditis. Surgical intervention is indicated when relief of pressure becomes necessary. This is a variable statement since quantities of fluid have been found which vary from one ounce to seventy five hundred c. c. The best guide is the toxicity of the patient and the first evidence of yielding of the veins to the increasing pressure in the pericardial space. This is usually evidenced by dyspnea, orthopnea, cyanosis, thready pulse, shock and collapse. This may come on very rapidly and carry the patient to a hasty death. If the pressure is not promptly relieved a fatal termination is inevitable. Aspiration may be done at once and repeated as often as indicated. Pericardotomy may be preferred and more successful. The further indications for surgical intervention lies with those cases of malignancy, tuberculosis, diabetes, nephritis, or other debilitating states where the fluid increases slowly and is not absorbed fast enough to prevent the elevation of the pressure within the pericardial space. Here again will appear the evidence of the veins yielding to the extra pressure with a closing of their lumen and shutting off of the flow of blood. Aspiration may be preferred in this type of case.

This, in a sketchy like manner, deals with the pericardium as a particular structure, frequently going unnoticed in the contest of body tissue with disease. While the contest is waged beneath a thick wall of tissue, and rarely comes out before the spot light, it is nevertheless worthy of a place with some of the more familiar stars, such as the pleura, peritoneum, synovia, and meninges.

If this paper has made us a little more mindful of this special structure in its difficulties and combats with diseases, its purpose has been achieved.

BIBLIOGRAPHY

1. Winslow, Nathan, and Shipley, A. M. *Archives of Surgery*, 1927, v. No. 3, p. 317.
2. Osler, William, *Principles and Practice of Medicine*, 10th ed.
3. Greene, Charles Lyman, *Medical Diagnosis*, 1922, 5th ed. p. 786.
4. Cabot, Richard C., *Physical Diagnosis*, 6th edition.
5. Tice, *Practice of Medicine*, Vol. 6, pp. 213-232.

THE OUTBREAK OF PELLAGRA IN ARKANSAS IN 1927*

By HARVEY S. THATCHER, M. D., Little Rock

During the year 1927, a noticeable increase of pellagra was observed in Arkansas. The Arkansas State Hospital for Nervous Diseases reported 70 cases during 1926 and 123 cases in 1927. The clinic of the University of Arkansas School of Medicine reported 8 cases during 1926 from April 1st to November 1st, inclusive, and 30 cases during 1927 for the same period. As these institutions received patients from various parts of the State it is indicative that pellagra had increased. A more detailed study was made by the co-operation of the American Red Cross in Pulaski County working with the refugees in the flood-stricken area. The American Red Cross reported 102 cases to November 1, 1927, 75 of which were acute and 22 of which were chronic in the flooded district in this county. Five of the acute cases died. The diagnoses of these pellagrins, except those which died, were confirmed.

Relief work was begun in Pulaski County by the American Red Cross, April 15, 1927. The work for pellagrins began August 1, 1927. The number of refugees during the emergency was approximately 12,000 and the number of families applying for relief was 4,647. This county has a population of 145,000, which is about one-fourteenth of the population of the State.

*From the Department of Pathology, University of Arkansas School of Medicine.

A careful examination of the diet was made before and after the flood. The diet consisted mainly of salt meat, dried beans and syrup, which was decreased after the disaster. Dr. Paul L. Day of the Department of Chemistry, University of Arkansas School of Medicine, estimated the Vitamine B content in the diet of the acute cases which developed after the flood (see table 1).

Although the table represents only an approximation of the Vitamine B content of the diet, it is apparent that a large percentage had this deficiency. It is also evident that the other vitamins, as well as calcium, are lacking in the diets. The gardens were destroyed by the inundation; hence these pellagrins did not have the fresh vegetables in their markedly decreased food supply.

The etiology of pellagra is obscure. Jobling and Peterson (1) have stated that pellagra is practically a disease of the unsewered areas. There was no sewerage on the plantations where the pellagrins in the above series were studied. The majority of the patients reviewed by Jobling and Peterson had their onset during June and July. The majority in this county had the onset during May. The dietary, or the infectious theory for the cause of pellagra has not been definitely determined. The pathological anatomy indicates a toxic or an infectious agent. Goldberger (2) has recently stated, it is probable that a pellagra-producing diet practically always contains some of the "P-P" Vitamine, but the quantity is not enough for the nutritional needs of some or all of these subsisting on it. If this statement were correct more of the refugees would have developed the disease. Pellagra did not occur during Civil War history or among the pioneers, and surely the diet was not rich in vitamins in those periods. Diet has something to do with the cure of the disease and probably has something to do with its cause, but further search must be made for some other etiological factor.

My thanks are due Miss Helen Riddick, Executive Secretary, Pulaski County Chapter, American Red Cross, for the co-operation of that organization.

BIBLIOGRAPHY

- (1) Jobling, James W., and Peterson, William; *The Epidemiology of Pellagra in Nashville, Tenn.*; *Jour. Infect. Dis.*, 1916, xviii, 501-567; *ibid.*, 1917, xxi, 109-131.
- (2) Goldberger, Joseph: *Pellagra in the Mississippi Flood Area*; *U. S. Public Health Reports*, Nov. 4, 1927, No. 44, xlii, 2706-2727.

TABLE 1

No. of Pellagrins	Vitamine B in diet before flood	Vitamine B in diet after flood
12	*	*
4	*	**
26	**	**
3	***	***
3	**	***
2	**	****
4	***	**
7	***	***
1	****	****
8	****	***
5	****	****
* Very poor.		
** Poor.		
*** Fair.		
**** Good.		

BING, H. I. SOME REMARKS ON
STETHOSCOPY

Bing emphasizes the fact that when pneumonia is complicated by pleuritis the diseased side arches somewhat outward and the intercostal furrow is eliminated. As the pleuritis is absorbed the side falls in.

By marking the boundary of the heart, that is, the total heart dullness, by percussion, you may be able day by day to follow how under correct treatment a dilatation to the right shrinks to normal, that is, reaches a little outside the right edge of the sternum.

In all cases where there are not very marked changes in the lungs, the patient should be examined in the sitting posture.

Bing emphasizes the fact that even by fairly slight percussion the whole lung may be set in motion.

The author describes the situation of the lungs relative to the surface. The plessimeter finger must be placed in as exact a position as possible, by placing the pulp of the hyperextended third finger in the place that is to be examined, and then striking on the basal part of the third phalanx.

The percussion beat is spread especially in the direction in which one makes the percussion. The recognition of this principle is of special value when using slight percussion.

The strength of the percussion beat is also of importance. By quite slight percussion only those waves lying nearest the direction wave are perceived, while the waves radiating out to the other sides and not hitting the heart do not reach at all to the perception. The direction wave is dulled by striking the heart. The pressure of the plessimeter finger is also of importance.

Supposing that the integuments covering the lung gradually become thicker to the right,

one will at slight percussion in this direction by and by get a more dull sound, because the force of the beat will to a greater degree be swallowed up by the integuments.

It is important always to hit the same place on the finger.

Generally a dullness due to swelling of a bronchial gland can only be pointed out on the right side where the bronchial glands are found in greater numbers and where they lie higher up than on the left side. If one fixes Kronig's borders and makes use of the breadth of the isthmus as a means of estimating whether there is infiltration of the apex, one may be led to a wrong result.—International Clinics, December, 1927.

Liver Extract No. 343—A water-soluble, nitrogenous, non-protein fraction obtained from fresh mammalian liver, manufactured under direction of the Committee on Pernicious Anemia of the Harvard Medical School. It is supplied in vials containing an amount of powdered extract (3 to 4 Gm.) representing 100 Gm. of fresh liver. Liver Extract No. 343 is used in the treatment of pernicious anemia. Only preliminary observations have been made concerning its value in conditions other than pernicious anemia; apparently it is of value in some other types of anemia, but definitely seems to be of little or no value in many cases of ordinary secondary anemia. Liver Extract No. 343 is administered orally. Eli Lilly & Co., Indianapolis. (Jour. A. M. A., February 4, 1928, p. 385).

Abramsism Abroad.—The fantastic hokum of Albert Abrams is practically a dead issue in the United States. It has been relegated in this country to obvious fakers, some osteopaths, and the occasional physician who suffers from an itching palm or a lack of scientific balance. The Abrams' fantastic hokum is now deluding the credulous in England, Canada and France. In Canada it has no support from the more responsible element of the medical profession. In France, the Abrams nonsense seems to be mainly boosted by one Regnault. It is in England, however, that the E. R. A. has taken on its most amusing, or, should we say, its most tragic aspect. The chief exponent of the Abrams cult in the British Isles is Sir James Barr, who was once president of the British Medical Association. Sir James seems to have swallowed Abrams' theories hook, line and sinker. (Jour. A.M.A., February 4, 1928, p. 401).

THE JOURNAL

OF THE

ARKANSAS MEDICAL SOCIETY

Owned by the Arkansas Medical Society and Published under the direction of the Council.

WILLIAM R. BATHURST, Editor
810-812 Boyle Building, Little Rock, Arkansas.

Published Monthly. Subscription \$3.00 per year; single copies 25 cents.

Entered as scnd-class matter, June 21, 1906, at the postoffice at Little Rock, Arkansas, under the Act of Congress of March 3, 1879.

Acceptance for mailing at special rate of postage provided for in Section 1103, Act of October 3, 1917, authorized August 1, 1918.

The advertising policy of this Journal is governed by the rules of the Council on Pharmacy and Chemistry of the American Medical Association.

All communications of this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the State. Notice of deaths, removals from the state, changes of location, etc., are requested.

OFFICERS OF THE ARKANSAS MEDICAL SOCIETY

HENRY THIBAUT, President.....	Scott
R. H. T. MANN, President-Elect.....	Texarkana
HOMER SCOTT, First Vice-President.....	Little Rock
J. B. WHARTON, Second Vice-President.....	El Dorado
O. J. T. JOHNSTON, Third Vice-President.....	Batesville
R. J. CALCOTE, Treasurer.....	Little Rock
Wm. R. BATHURST, Secretary.....	Little Rock

COUNCILORS

First District—W. W. VERSER.....	Harrisburg
Second District—J. L. JONES.....	Searcy
Third District—M. C. JOHN.....	Stuttgart
Fourth District—W. T. LOWE.....	Pine Bluff
Fifth District—L. L. PURIFOY.....	El Dorado
Sixth District—B. C. MIDDLETON.....	Texarkana
Seventh District—DEWELL GANN, SR.....	Benton
Eighth District—ANDERSON WATKINS.....	Little Rock
Ninth District—SAM G. DANIEL.....	Marshall
Tenth District—THOMAS DOUGLASS.....	Ozark

COMMITTEES

SCIENTIFIC PROGRAM—R. J. Calcote, Little Rock, chairman; A. D. Cathey, El Dorado; O. A. Carruth, Little Rock.
SCIENTIFIC EXHIBIT—Chas. E. Oates, Little Rock, chairman; O. C. Melson, Little Rock; M. V. Russell, El Dorado.
STUDENT LOAN FUND—E. F. Ellis, Fayetteville, chairman; Henry Thibault, Scott; Wm. R. Bathurst, Little Rock.
NECROLOGY—F. A. Corn, Lonoke, chairman; M. C. John, Stuttgart; Geo. B. Fletcher, Hot Springs.
MEDICAL LEGISLATION—Frank Vinsonhaler, Little Rock, chairman; M. D. Ogden, Little Rock; A. C. Watson, England.
HEALTH AND PUBLIC INSTRUCTION—John R. Dibrell, Little Rock, chairman; Anderson Watkins, Little Rock; E. L. Watson, Newport.
CANCER CONTROL—A. M. Zell, Little Rock, chairman; A. A. Gilbert, Fayetteville; W. E. Stallings, Newport.
INFANT WELFARE—Clinton A. Rice, Rogers, chairman; A. C. Kirby, Little Rock; H. A. Ross, Arkadelphia.
HOSPITALS—W. G. Eberle, Fort Smith, chairman; J. A. Foltz, Fort Smith; J. W. Butts, Helena.

Editorials

THE ANNUAL MEETING

It may appear out of season at first thought to talk about May, when the thermometer has been ranging around freezing point and winter is not yet gone; but this March issue of the Journal is only two months from May and the annual meeting of the Arkansas Medical Society will be held during the first three days of that month. Therefore, this issue and the April number will be the only two published before the convention is called to order at El Dorado.

A preliminary announcement of the scientific papers to be read and their authors will be found immediately following this article. The program committee has furnished a schedule which will be published in full in the April number of the Journal. Chairman Calcote has worked hard to prepare such a program as will insure both pleasure and profit to all who attend; in fact, it is so good that no member can afford to stay away, unless absolutely compelled so to do.

The annual meeting has been held before in El Dorado. That was in 1914. Many new members have been received since then and quite a number of our members have passed away; but those of us who attended that meeting will still remember pleasantly the royal welcome we had and how finely the Union County Medical Society and the good people of El Dorado entertained the visitors socially. We may be assured that the members this year will enjoy just such another all around good time.

OUR ANNUAL MEETING

R. J. CALCOTE

This is to remind you of our annual meeting, which will be held at El Dorado, May 1, 2, and 3, 1928, with headquarters at the Garrett Hotel. A preliminary report of our program will be published in our Journal next month. Frankly we believe this is the best program that has ever been offered at any of our meetings.

We shall have as our guests Dr. Jabez N. Jackson of Kansas City, President of the American Medical Association and surgeon of note, Dr. H. W. E. Walther of New Orleans, Assistant Professor of Urology at Tulane, Dr. Henry Boswell, Superintendent of the Mississippi State Tuberculosis Sanatorium, Dr. E. C. Mitchell, Professor of Pediatrics, University

of Tennessee, and Dr. S. E. Thompson, an eminent tuberculosis specialist of Kerrville, Texas. Negotiations are under way with other prominent men, who will probably appear on our program. And of our home talent we believe you will agree that a better assemblage has never been gotten together from the profession of this State. Most every phase of medicine will be represented. The general practitioner, the surgeon, the internist, the pediatrician or other specialist will find something of interest on this program.

Besides the scientific program there are other important features, the social program and the exhibits. It has been a long time since El Dorado has entertained us and it has grown from a small city of a few thousand to a busy oil metropolis. We are sure the El Dorado doctors will make wonderful hosts. Our commercial and scientific exhibits always speak for themselves.

Come spend three pleasant profitable days with your friends. Remember the date, May 1, 2, and 3, 1928, and remember the place, El Dorado.

NEED OF A STATE CHARITY HOSPITAL

The letter of Dr. F. Vinsonhaler, Dean of the School of Medicine, University of Arkansas, published in the February issue of the Journal, together with the communication from former Governor T. C. McRae on the same subject are worth more than passing attention. Eleven years ago Governor McRae in a message to the Legislature then in session, suggested the urgent need of a State Charity Hospital, calling attention to the fact that every county in the State had its problems of caring for indigent sick, crippled and inefficient. Outside of a few counties having large towns or cities with hospitals, many other counties have not the proper facilities for caring for these unfortunates who have not the means to employ professional aid. Many of these require special treatment, surgical or medical, and in some cases the services of nurses. It is to meet this need that Governor McRae urged the Legislature to act.

Dr. Vinsonhaler's letter dealing with the same subject also treats it from another angle. He calls attention to the need of better housing of the medical school, which at present uses, by courtesy, the old State House, an old and unsafe building and inconvenient. Be-

sides that, only the first two years courses are given there, while the junior and senior courses are given at the Isaac Folsom Clinic at Second and Sherman Streets.

The rules of the Council on Medical Education of the American Medical Association demand that "A" grade medical schools have control of a hospital for teaching purposes. Our State Medical School has no such control and hospital work is done by the courtesy of the other hospitals. This does not meet the requirements of the American Medical Association, but that body has indulged the local medical school by extending the time limit in which such hospital control is assured. Knowing that this Association will not wait always, an earnest effort is to be made to induce the next Legislature, which meets next January, to put Arkansas in line with all progressive States by adopting a measure and making the necessary appropriation to insure the erection of a State Charity Hospital.

The State Medical Society as a body should indorse this movement and every physician can help put this over by seeing the members of the Legislature and enlisting their interest in this greatly needed project.

Personal and News Items

Dr. J. P. DeLaney is associated with Dr. J. P. Runyan at St. Luke's Hospital, Little Rock.

Dr. and Mrs. Robt. Caldwell have returned after a three weeks visit in Florida and Cuba.

The Boone County Medical Society elected the following officers for 1928:

President, D. K. McCurry, Alpena Pass; Vice-President, J. G. Gladden, Western Grove; Secretary-Treasurer, J. H. Fowler, Harrison; Delegate, J. H. Fowler; Alternates, D. L. Owens, J. C. Blackwood and J. G. Gladden.

Dr. E. P. Bledsoe, Superintendent of United States Veterans' Hospital No. 78, at Fort Roots for the last six years, will leave for Chicago to assume his duties at the North Chicago Government Hospital, to which he was transferred by Gen. Frank T. Hines, director of the Veterans' Bureau. Dr. Henry L. Stick of Philadelphia, has been ordered transferred to the Fort Roots Hospital.

DR. H. S. CUMMING REAPPOINTED SURGEON GENERAL OF UNITED STATES PUBLIC HEALTH SERVICE

On January 27, the President sent to the United States Senate the name of Dr. Hugh S. Cumming for reappointment as Surgeon General of the United States Public Health Service. It was confirmed immediately without the formality of being referred to a committee.

The appointment of Surgeon General Cumming to succeed himself is sufficient ground in itself for congratulating the people of the country; but there is even a greater reason for felicitation and that is the fact that the services of one who has proved his worth in the field of public health are appreciated to the extent that no question of replacing him at the expiration of his term of office arises, either in the mind of the President or in the Congress.—Health News, New York State Dept. of Health.

COUNCIL PASSED

The notable success of many pharmaceutical products which have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association for inclusion in "New and Non-official Remedies" recommends not only the plan itself, but the wisdom of the medical profession in selecting these reliable "Council Passed" remedies for daily use.

Among the medicinal chemicals now being widely used are such "Council Passed" products as Ephedrine Hydrochloride, Neocinchophen, Butyn, Metaphen, Butesin Picrate, Anesthesin, Chlorazene, Amidopyrine, Procaine and Neutral Acriflavine, all of which are described in the recent edition of "New and Non-official Remedies."

These remedies are the result of research and clinical study. They have been announced in our pages and are worthy of further investigation on the part of our readers.

FOR SALE—X-Ray machine 5 in, 30 ma. Bucky diaphragm, screens, cassettes, illuminator, fluoroscopic screen, complete developing equipment, good as new, a real bargain. Address: X, care this Journal.

At the 44th Annual Convention of The Tri-State Medical Association of Mississippi, Arkansas and Tennessee, which met in Memphis, February 29, March 1 and 2, the following

officers were elected: President, V. B. Philpot, Houston, Miss.; State Vice Presidents: A. G. Payne, Greenville, Miss.; Julius A. Bogart, Forrest City, Ark.; and George W. Penn, Humboldt, Tenn. Dr. A. F. Cooper, Memphis, was re-elected secretary-general. Registration shows the following Arkansas physicians in attendance:

J. T. Altman, Jonesboro; J. L. Baird, Marked Tree; E. Baker, Dermott; Oscar Barksdale, Wilson; W. F. Barrier, Malvern; C. A. Bates, Lake City; S. S. Beaty, England; T. E. Benton, Lonoke; J. A. Bogart, Forrest City; A. B. Carney, Fort Smith; E. J. Chaffin, Hughes; Allen E. Cox, Helena; J. A. Dillman, Paragould; H. A. Dishongh, Little Rock; H. C. Dorsey, Fort Smith, Walter G. Eberle, Fort Smith, W. E. Ellington, Paragould; N. G. Ellis, Wilson; G. W. Eubanks, Wabash; S. A. Ferrell, Brickeys; J. C. Gilliam, Des Arc; J. L. Griffin, Vanndale; W. A. Grimmett, Blytheville; W. G. Hodges, Malvern; J. B. Holmes, Hulbert; J. L. Hare, Wynne; C. M. Harwell, Osceola; R. M. Jernigan, Jonesboro; F. H. Jones, Piggott; Edward Kultgen, Elaine; J. H. Luckett, Dell; P. W. Lutterloh, Jonesboro; J. H. McCurry, Cash; Chas. H. Lutterloh, Jonesboro; Chas. P. McCracken, Jonesboro; W. S. McCall, Blytheville; L. H. McDaniel, Tyronza; Mae McLendon, Marianna; E. P. McGehee, Lake Village; L. C. McVay, Marianna; L. D. Massey, Osceola; W. J. Mathis, Cotton Plant; J. M. Matthews, Morrilton; J. S. Miller, Parkin; W. A. Montgomery, Atkins; W. M. Owens, Armorer; A. C. Parker, Clarkedale; G. E. Paulns, Marked Tree; E. W. Pollard, Hughes; B. V. Powell, Camden; C. V. Powell, Round Pond; E. A. Purdum, Hot Springs; R. L. Purnell, Madison; L. H. Stout, Brinkley; J. H. Slaughter, Norphlet; J. L. Smiley, Siloam Springs; R. L. Smith, Russellville; J. D. Southard, Fort Smith; W. J. Sheddan, Osceola; W. W. Strange, Smackover; H. A. Stroud, Jonesboro; A. M. Tullos, Trumann; M. O. Usrey, Blytheville; G. C. Webb, Russellville; Jerome Wright, Russellville.

Communications

Lonoke, Ark., February 18, 1928.

Editor Journal of the Arkansas Medical Society:

I would be pleased to have your co-operation in compiling some statistical data, so far

as the personal experience of the members of the Arkansas Medical Society is concerned, with reference to that of personal knowledge and experience of the members of our State Society as to childbirth with the membranes intact, entirely unruptured after the birth of the child.

I have had that experience on two separate occasions, one in a negro woman, a multipara, with a negative history as to syphilis or other constitutional dyscrasias; and on the night of February 17, 1928, I was hurriedly called to attend a Mrs. McN., age, 29 years living within three miles of my home.

When I arrived she informed me that the child had been born some 30 minutes. As quickly as I could prepare, I made an examination and discovered that a child of seven months development lay on the bed completely enveloped in the membranes. Upon opening the sac I removed the baby, which was stillborn, a girl which evidently was presented head first. So soon I had done this, I discovered that there was another presenting feet first which I quickly delivered and it too was entirely enveloped in the membranes intact. I cut the sac and extracted a boy baby. It too was stillborn. Each weighed three pounds with no evidences of any abnormality, except the deficiency in weight.

Within the past 18 months I also attended this woman and upon arrival found twins, a boy and a girl weighing some five pounds each, and she asserted they come at term. They lived only a few hours.

The father of these children is 30 years of age, well nourished, with negative history, except that he is a chronic asthmatic.

They have two living children both of which seem normal in every respect.

Since this is such an unusual experience I thought it might be of interest to our members. Then, too, I would very much appreciate it to know if such experience has occurred to other members within the State.

In my experience of the 17th, when I arrived one child had been born with the entire placenta intact. The other child was born with the exception of the delivery of the head, and with it also the entire placenta was intact. In other words, I had to use scissors to open the sac in its entirety so as to extract the fetus.

The cords in both were unusually short.

When a child is born with a caul it is simply the fact that the membranes are unusually resistant to ordinary rupture, but in that instance the entire placenta is not delivered along with the delivery of the child.

In my three cases the entire placental structures were delivered absolutely intact. There evidently was a complete separation of the placenta before the delivery, consequently a stillbirth was inevitable.

Had I been present previous to the delivery of the head or the appearance of the head or the first child near the vulvar orifice, I should have ruptured the preceding membranes, likewise on the approach of the feet of the second child. But could anything have been done to prevent a stillbirth?

In my opinion it is an unusual procedure on the part of nature, and it in reality becomes a peculiar phenomenon of interest.

I shall appreciate any comments or constructive criticism.

Yours fraternally,

H. N. STREET, M. D.

Obituary

SANER, WILLIAM F.—Dr. W. F. Saner of Hope, aged 62, died in a hospital in Dallas, Texas, February 28, 1928. He is survived by his widow, a son, O. B. Saner, Chicago, and two brothers, R. E. L. and John of Dallas.

MORGAN, T. MADISON—Dr. T. M. Morgan of El Dorado, aged 42, was found dead in his automobile, March 7, 1928, having been shot through the heart. He is believed to have been dead nearly 24 hours when found. He had been city health officer for two years. He was a graduate of the University of Arkansas School of Medicine.

Dr. Morgan is survived by his parents, Mr. and Mrs. Asa Morgan, his widow and two small children.

KING, K. W.—Dr. K. W. King of Bradford, died in Searcy, January 31, 1928. Aged 49.

County Societies

BENTON COUNTY

(Reported by C. S. WILSON, Secretary)

The Benton County Medical Society met February 9, 1928 at Siloam Springs, in the parlor of a local hotel. The president, J. L. Clemmer, being unable to attend, J. L. Smiley presided.

Members present: Atkinson, Duckworth, Eubanks, Gullledge, Hughes, Scott, Smiley, Wilson, Powell and Highfill. Visitors: J. S. Allison and A. A. Baird of Tahlequah, Okla.; Robt. M. Church, Stillwell, Okla.; R. L. Sellers, Westville, Okla.; Isaac W. Rogers, Watts, Okla.; J. A. Robinson, Cincinnati, Ark.; S. A. Grantham, Joplin, Mo.

Dr. Grantham presented a paper on "Bone Surgery." Osteomyelitis was the feature most stressed. He gave very interesting demonstrations of some of his own work. So much interest was expressed in his remarks, that unlimited time was granted him in presenting his paper.

BOONE COUNTY

(Reported by J. H. FOWLER, Sec.)

The Boone County Medical Society met March 6th, Dr. D. K. McCurry, Presiding.

Among those present we had Dr. N. L. Bawer of Broken Bow, Oklahoma, who was a former member of our society.

Two cases presented by Dr. J. C. Blackwood furnished an interesting clinic. Dr. D. L. Owens reported a case which brought out quite a discussion as to the advisability of using the curette, placenta forceps, application of iodine, and other remedies. In the treatment of incomplete abortion, there was quite a difference of opinion expressed.

A paper, "Why Should Boone County Have a Medical Society?" was presented by Dr. J. H. Fowler and among the comments came one from our old friend, Dr. J. L. Sims, who stated that he had been a member of the Boone County Medical Society for forty-eight years and he expected to continue to attend the meetings as long as he is able. He spoke of the society in its early days, and mentioned the late Drs. Leonidas Kirby and H. L. Routh as faithful members.

After the meeting a banquet was served for the doctors and their wives and guests. Dr. Charlie Routh, in the capacity of toast-master, conducted a very interesting impromptu program.

CRAWFORD COUNTY

(Reported by J. A. WIGLEY, Secretary)

The Crawford County Medical Society met in Van Buren, January 26, 1928. President, Dr. O. M. Bourland, presiding.

Members present: Bourland, Dibrell, Blake-more, Bennett, Kirkland, Galloway, Stewart, Savery, Trice, Reves, Grant, Kirksey and Wigley. Visitors: Drs. Douglass and Porter of Ozark; Hynes, Moulton, Cooper, Goldstein, Hogue, Buckley, Billingsley, Harvey, Little Taylor, Dorsey, Carney, Jones and Rose of Fort Smith.

Dr. Kirksey was elected to membership in the society.

Dr. Reves presented a case of "Tularemia," which elicited free discussion.

Several very interesting case reports of unusual gunshot wounds were discussed.

Officers elected for the ensuing year were as follows: President, B. L. Bennett; Vice-President, S. D. Kirkland; Secretary-Treasurer, J. A. Wigley; Delegate to the State meeting, J. A. Wigley; Alternate, W. R. Reves.

Following adjournment, dinner was served at the Blue Dragon. Mrs. F. G. Ken, hostess. Among the speakers at dinner were: Drs. Bourland and Hynes.

INDEPENDENCE COUNTY

(Reported by M. S. CRAIG, Secretary)

The Independence County Medical Society met at the County Courthouse, February 6, 1928. Previous to the meeting, supper was served the members at the hotel.

Present: Evans, Sullivan, E. M. Gray, F. A. Gray, Huskey, Johnston, Craig.

Drs. Johnston, Hooper and Huskey were appointed a committee to draft resolutions of respect for two of the deceased members, Drs. W. B. Lawrence and K. W. King.

The following program was rendered: "Uterine Hemorrhage and Treatment," F. A. Gray; "Influenza," E. M. Gray.

The next meeting of the society will be the second Monday night in April.

INDEPENDENCE COUNTY

(Reported by M. S. CRAIG, Secretary)

The Independence County Medical Society met in Batesville, December 12, 1927, with the following members present: E. M. Gray, F. A. Gray, Laman, McAdams, Johnston, Hinkle, Huskey and Craig.

Officers elected for the year 1928, are as follows: President, C. G. Hinkle; Vice-President, L. T. Evans; Secretary, M. S. Craig; Delegate to the Arkansas Medical Society, O. J. T. Johnston; Alternate, I M. Huskey.

The following program was rendered: "Iritis" by Dr. Hinkle; "Pertussis," Dr. McAdams; "Influenza," Dr. Huskey.

The Society adjourned to meet the second Monday night in February.

LONOKE COUNTY

(Reported by H. THIBAULT, Sec.)

The Lonoke County Medical Society met at Lonoke, February 8, 1928. Dinner was served the members and visiting physicians by Dr. and Mrs. T. E. Benton.

The scientific program for the meeting was a general discussion of "Syphilis." It is found that the plan of having a general discussion, of some previously announced subject, is more attractive than having papers read, and has greatly increased the attendance. It is also found that having visitors from the surrounding counties adds greatly to the interest in the meetings.

With a membership of twenty-one, the average attendance for the last fifteen months has been seventeen.

At the meeting held November 9, 1927, the following officers were elected for 1928:

President, A. C. Watson; Vice-President, W. B. Crowgey; Secretary-Treasurer, Henry Thibault; Delegate, Arkansas Medical Society, S. S. Beaty; Alternate, F. A. Corn, Sr.; Councilor, O. D. Ward.

The next meeting will be held Wednesday, March 14th. The subject for discussion will be, "Diarrheas and Dysentery."

MISSISSIPPI COUNTY

(Reported by F. D. SMITH, Secretary)

The Mississippi County Medical Society met in regular session, Tuesday, February 14, at the Noble Hotel in Blytheville.

Present: Harwell, Hudson, Wilson, McCall, Husbands, Grimmett, Hill, I. R. Johnson, Saliba, Tipton, Washburn, Sims, and Smith.

Dr. P. L. Tipton was elected to membership.

After disposing of the regular business, a quiz was held, with Dr. McCall acting as quiz-

master. Subject discussed was "Acute Diseases of the Chest."

The next meeting will be held at Osceola, the second Tuesday in March.

SEBASTIAN COUNTY

(Reported by C. S. BUNGART, Sec.)

The Sebastian County Medical Society met February 14. The meeting was called to order by the President, Dr. D. W. Goldstein.

Present: C. E. Benefield, J. H. Benefield, Ebelre, Jones, Thompson, J. D. Southard, Jeff Southard, Riddler, Holt, Hoge, Chapman, H. Moulton, Everett Moulton, Foltz, Wilson, Jeffery, Johnson, Dorente, Dorsey, Little, Cooper, Rose, Hynes, Stubbs, Carney, Harvey and Redman.

Scientific program chairman, Dr. W. G. Eberle, arranged the program. "Physical Examination of the Apparently Healthy Individual." Demonstration of examination on a patient was given. Drs. Foltz, Hoge, Southard, Dorente, Cooper, Moulton and Goldstein assisted. Dr. Eberle gave a summary of the examination and what these examinations mean.

Fifteen minute discussion on an ethical question. "Advertising in Medicine" was the subject for the evening, with the reading of this paragraph from the Code of Ethics.

At every meeting there will be a discussion on some point of ethics.

WHITE COUNTY

(Reported by F. P. HARDY, Sec.)

The monthly meeting of the White County Medical Society was held at Kensett, March 1, 1928. President Moore, in the chair.

Members present: Moore, Harrison, Allbright, Hassell, Brewer, Purnell, Havener, Jones, Parker and Hardy.

Visitors: Drs. Hinkle, Carruthers and Hoge of Little Rock.

Scientific program as follows:

"Obstetrics" by S. B. Hinkle; "Significance and Treatment of Osteomyelitis" by F. W. Carruthers and S. F. Hoge.

Dr. Orlie Parker, who has charge of the newly created Health Unit for White County, was received into the Society by transfer from the Phillips County Society.

Dr. Purnell of Kensett distributed cigars during the meeting.

The next meeting of the Society will be held at Searcy, April 5.

Abstract

EARLIER DIAGNOSIS OF MEASLES

Philip Moen Stimson, New York (Journal A. M. A., March 3, 1928), discusses the earlier diagnosis of measles. From exposure to the onset of the first symptom of the disease—usually fever—is the period of incubation. This averages fairly close to ten days, with only rare cases falling outside the seven to fourteen day or second week limit. The duration varies with the virulence of the organism and the resistance of the patient the more severe cases usually showing the shorter incubation periods. The blood may early show a slight leukocytosis lasting to the middle of the period of incubation and followed by a more definite lymphocyte leukopenia toward the end of this period. In general, the features of the period of invasion may be readily enumerated chronologically by associating them with the fingers of the outspread hand. Beginning with the little finger is the first symptom, fever. Twelve hours later comes the ring finger, or puffiness of the lower eyelid and perhaps the measles line, together with the first sign of the enanthem or rash on the fauces. Twelve hours later, or middle finger, come the evidences of catarrh, also known as the three C's; to-wit, conjunctivitis, coryza and cough. Twelve hours later, or the forefinger, are found Koplik's spots. Thirty-six hours later, or as far from the forefinger to the thumb as it is from the little finger to the forefinger, comes the rash or exanthem, and for the palm of the hand we have a certain amount of headache and a considerable malaise throughout this period. A fairly definite line of congestion across each lower lid, about at the margin of the tarsal cartilage and perhaps a third of the way from the lid margin to the fornix may accompany the puffiness of the lower eyelids. This so-called measles line must be quite marked to be suggestive. It is best seen for the first time in a child in whose case there is a history of a known exposure to the disease some ten days before the day of examination and who has that day or the day before shown the first slight elevation of temperature above normal. Its duration as a line is quite brief as a rule, the injection spreading in a day or so to involve the entire peripheral conjunctiva and later the palpebral conjunctiva also. When this line has been obscured by the more general conjunctivitis, puffiness of the lids becomes marked and there is us-

ually a seropurulent exudation with considerable photophobia. The caruncle at the inner corner of the eye becomes swollen, and occasionally there can be found thereon two or three tiny elevated bluish white spots, possibly similar in nature to the buccal spots, popularized by Koplik. Occasionally there may be found, particularly on the chest and neck, a prodromal eruption occurring during the first day or two of the fever. About the second day of fever, the enanthem appears on the soft palate, the uvula, the tonsils or the posterior pharyngeal wall. This enanthem usually lasts until the eruption on the skin is well marked, and it fades as the fever in uncomplicated cases returns to normal. Profuse involvement of the pharynx may be accompanied by pain, especially on swallowing. There next appear in the average case the clinical manifestations of catarrh. Koplik's spots comprise the first pathognomonic sign of measles. When marked these spots resemble grains of white pepper loosely sprinkled on a red background. They first appear, usually on the second or third day of the disease, as small red patches in the center of which is a tiny opalescent whitish speck, much smaller than a pinhead. They are usually first found in the mucous membrane on the inside of the cheek about opposite the first molar teeth, but as they become more numerous they may be found all over the inside of the cheeks and in marked cases on the mucous membranes of the gums and lips. They have also been reported in nasal and vaginal mucous membranes as well as on the inner caruncle of the eye. When marked, they are usually seen in any light, and the patient may speak of the mucous membrane of the cheek as feeling rough to the tongue. When few or fading or just appearing they are best seen in strong daylight, and occasionally cannot be seen at all by artificial light. Koplik's spots usually disappear as the exanthem appears, and are found when looked for in about 90 per cent of cases of measles. Koplik's spots are of especial importance because when they have been found a definite diagnosis of measles can be made and the child isolated possibly two or three days before the appearance of the rash makes the disease self-evident. The day of the appearance of the exanthem or rash should be considered at least the fourth day of the case of measles, and exposure to others should be dated from the third day prior thereto. The author makes a plea for the individual isola-

tion of every person with measles. Measles, by itself, very rarely kills or cripples. It is the complications which are due to secondary infections that cause the deaths in almost every instance.

Book Reviews

Disorders of the Nose, Throat and Ear.—Problems of Deafness. By Aaron Roth, M. D., F. A. C. S., Attending Ear, Nose and Throat Surgeon, Jewish Hospital, Brooklyn, N. Y. With original illustrations by the author. Published by Physicians and Surgeons Book Company, Henry and Pacific Streets, Brooklyn, New York. Price, \$2.50.

The author of this book emphasizes the chapter on Deafness, its nature and causes; a few points concerning the management of those hard of hearing and the prevention of deafness.

He says: "The prevention of deafness resolves itself into a medico-social battle against those natural seen and unseen forces which produce the conditions and diseases resulting in defective hearing.

This problem calls for the concerted efforts of the legislative, educational and medical authorities of a community. It is by no means merely a problem for the expert in ear diseases. The responsibilities must be shared in by the government, the parents, the family physician, the teacher and the otologist."

The Human Body in Pictures.—A Visual Text of Anatomy, Physiology and Embryology. By Jacob Sarnoff, M. D., Associate Surgeon, United Israel-Zion Hospital; Formerly Associate and Instructor of Anatomy, Long Island Medical College, Brooklyn, New York. 190 original illustrations, mostly from dissections and animated drawings by the author. Published by Physicians and Surgeons Book Co., Henry and Pacific Streets, Brooklyn, N. Y. Price, \$2.00.

This book describes and illustrates the development, structure and functions of the human body. It is a valuable adjunct to lectures and larger textbooks, and will greatly facilitate the teaching of anatomy and physiology.

In no field of medicine is such far-reaching imposition practiced as in the giving of mixed gland preparation; in the case of some physicians it has assumed the proportions of a medical cult.—*Jour. A. M. A.*, March 3, 1928.

The question has been raised as to what basic science acts have accomplished. You must remember that basic science acts are in most cases only a few months old. The act of Washington, the act of Minnesota, the act of Nebraska are less than a year old. Obviously you couldn't expect much results from those. We have not heard any particular reports from Wisconsin or from Connecticut as to the operations of those acts, and in any event the figures given would be entirely too small. It is suggested that one prophesy what basic science acts will accomplish. Obviously, the most basic science acts will accomplish is to see that the persons who go before the professional boards have a sound knowledge of the sciences underlying the healing arts. It is for the professional boards to see that they are qualified to practice those arts. The basic science board is one step further removed from actual law enforcement than is the professional board. It has been said here, and I think with reasonable approximation to accuracy, that the licensing board should not be charged primarily with the enforcement of the professional act. Why, then, should a basic science board be expected to enforce a basic science act? The law of the State says that the professional board shall examine no one who has not a certificate of proficiency from the basic science board. It is to be presumed, then, that the professional board will see that no one is admitted unless he has this sound grounding in the basic sciences. I think if one has that sound grounding in the basic sciences, he will be a better physician or a better osteopath or a better anything else than he would if he hasn't it.—*W. C. Woodward, M. D.*

Electricity, like every other potent force used in medicine, is a two-edged sword; in the hands of the ignorant it may work disaster.—*Jour. A. M. A.*, March 3, 1928.

Medical economics—the science of making a living while satisfying the notions of socialists and social workers.—*Jour. A. M. A.*, March 3, 1928.

Nothing costs so much to build as good will—but it is the tenderest of plants and easily destroyed.—*Jour. A. M. A.*, March 3, 1928.

THE JOURNAL

OF THE

Arkansas Medical Society

PUBLISHED MONTHLY UNDER THE DIRECTION OF THE COUNCIL

Vol. XXV

LITTLE ROCK, ARK., APRIL, 1928

No. 11

Original Articles

DRAFT OF PROPOSED BASIC SCIENCE LAW

To enforce through a non-partisan board, uniform minimum requirements as to pre-professional education and as to ability in anatomy, physiology, chemistry, bacteriology, pathology, and hygiene for physicians (non-sectarian, osteopaths, chiropractors, naturopaths, and cults generally.)

A BILL FOR AN ACT

To Be Entitled "An Act"

TO ESTABLISH A STATE BOARD OF EXAMINERS IN THE BASIC SCIENCES, TO PROVIDE FOR ITS ORGANIZATION AND POWERS, TO PROVIDE THAT CERTIFICATION BY SUCH BOARD BE A PREREQUISITE TO ELIGIBILITY FOR EXAMINATION FOR LICENSE TO PRACTICE THE HEALING ARTS; TO DEFINE THE HEALING ARTS, AND TO PROTECT THE PUBLIC HEALTH IN THE STATE OF ARKANSAS.

Be it enacted by the General Assembly of the State of Arkansas:

Be It Enacted by the People of the State of Arkansas:

SECTION 1. *Basic Science Certificate Required.* No person shall be eligible for examination or permitted to take an examination for a license to practice the healing art or any branch thereof, or granted any such license, unless he has presented to the licensing board or officer empowered to issue such a license, a certificate of ability in anatomy, physiology, chemistry, bacteriology, pathology, and hygiene (hereinafter referred to as the basic sciences), issued by the State Board of Examiners in the basic sciences.

SECTION 2. *The Healing Art Defined.* For the purposes of this Act, any license authorizing the licentiate to offer or undertake to diagnose, treat, operate on, or prescribe for any human pain, injury, disease, deformity, or physical or mental condition is a license to practice the healing art.

NOTE: The purpose of this definition is to bring within the scope of this Act all licenses to practice medicine, osteopathy, chiropractic, naturopathic, sanipractic, and other modes of healing or attempted healing. The definition here given is broad enough to cover dentists, midwives and nurses, but a later provision excepts them from the operation of the Act.

SECTION 3. *Board of Examiners in the Basic Sciences: Appointment and Personnel.* The Governor shall appoint a State Board of Examiners in the Basic Sciences (hereinafter referred to as the Board), consisting of five members, who shall be appointed one for one year, one for two years, one for three years, one for four years, and one for five years, from the dates of their respective appointments. *Upon the expiration of the term of any member, the Governor shall fill the vacancy by appointment for a term of five years.* Upon the death, resignation, or removal of any member, the Governor shall fill the vacancy by appointment for the unexpired portion of the term.

Every member shall serve until his successor is appointed or qualified. The members of the Board shall be selected because of their knowledge of the basic science aforesaid. *No member of the Board shall be actively engaged in the practice of the healing arts or any branch thereof.*

NOTE: This section aims at the creation of an examining board in which, by reason of the overlapping of the terms of members, there will be a continuity of policy and administration. No direct prohibition has been placed on the appointment of physicians, osteopaths, chiropractors, or other cultists, except that the appointee shall not be in active practice. It has been proposed to limit the appointments of members of basic science boards to members of faculties of approved uni-

versities and colleges. It has been proposed, too, to forbid the appointment of anyone having any connection with any school teaching the healing art in any form or anyone interested in any such school. The provision here made leaves to the Governor the determination of the advisability of appointments within the classes just named. So far as the medical profession in this State is concerned, it should certainly be able to bring enough influence to bear on the Governor to see that the rights of nonsectarian medicine are not infringed in making appointments.

SECTION 4. *Organization of Board: Election of Officers, Seal, Rules, Compensation.* The Board shall meet and organize as soon as practicable after appointment. It shall have power to elect officers, to adopt a seal, and to make such rules as it deems expedient to carry this Act into effect. Each member of the Board shall receive ten dollars per diem and actual expenses, when actively engaged in the discharge of his duties. The compensation of the members and the other expenses of the Board shall be paid out of the fees received from applicants, *but this is not to be construed as preventing appropriations to cover deficits.* The treasurer of the Board shall give such bond, running in favor of the State, as the State treasurer shall determine.

The office of the Board shall be in the State Capitol, and quarters for such office shall be assigned in the Capitol building or any other building occupied by the State Government.

SECTION 5. *Fees Payable by Applicants.* The fee for examination by the Board shall be fifteen dollars. The fee for re-examination within any twelve-month period as hereinafter provided shall be five dollars, but the fee for re-examination after the expiration of twelve months shall be the same as the original fee. The fee for the issue of a certificate by authority of reciprocity, on the basis of qualifications as determined by the proper agency of some other State, shall be five dollars. All fees shall be paid to the Board by the applicant at the time of filing application. The Board shall pay all money received as fees, into the State Treasury, to be placed in a special fund to the credit of the Board. The Treasurer shall pay out of such fund all expenses incurred by the Board, on vouchers signed by the President and the Secretary of the Board.

SECTION 6. *Examinations.* The Board shall conduct examinations at such times and places as it deems best. Every applicant, except as hereinafter provided, shall be examined to

determine his knowledge, ability and skill in the basic sciences. The examination shall be conducted in writing, but may be supplemented by an oral examination, and if practicable shall be supplemented by examination in the laboratory, dissecting room, and dispensary, and at the bedside. If the applicant receives a credit of seventy-five per cent or more in each of the basic sciences, he shall be considered as having passed the examination. If the applicant receives less than seventy-five per cent in one subject and receives seventy-five per cent or more in each of the remaining subjects, he shall be allowed a re-examination at the examination next ensuing, upon application and the payment of the prescribed fee; but he shall be required to be re-examined in all branches. If the applicant shall receive less than seventy-five per cent in more than one subject, he shall not be re-examined within the period of one year next following his original examination nor unless he presents proof satisfactory to the Board of additional study in the basic sciences sufficient to justify re-examination.

SECTION 7. *Requirements for Certificate.* No certificate shall be issued by the State Board of Examiners in the Basic Sciences unless the person applying for a certificate submits evidence satisfactory to the Board that (1) he is not less than twenty-one years of age; (2) he is a person of good moral character; (3) he was graduated by an accredited high school or school of similar grade, or possessed educational qualifications equivalent to those required for graduation by such an accredited high school, before he began the study of the healing arts; and (4) he has a comprehensive knowledge of the basic sciences as shown by passing the examination given by the Board, as by this act required.

NOTE: No evidence is required of the applicant of the extent and nature of his knowledge of the basic sciences. These are to be determined by the Board by examination. The professional licensing board to which the applicant must subsequently apply for his licensing board to which the applicant must subsequently apply for his license to practice is to be at liberty, it is proposed, to accept the findings of the State Board of Examiners in the Basic Sciences with respect to the proficiency of the applicant in those sciences, or to re-examine the applicant in those sciences on its own account.

SECTION 8. *Reciprocity.* The State Board of Examiners in the Basic Sciences may in its discretion waive the examination required by Section 7 when proof, satisfactory to the

Board, is submitted, showing that the applicant has passed the examination in the basic sciences before a board of examiners in the basic sciences or a board authorized to issue licenses to practice the healing art, in another State, when the requirements of that State are, in the opinion of the board, not less than those provided by this act. The provisions of this section shall apply only to examinations conducted by the boards or officers of States that grant like exemption from examination in the basic sciences to persons granted certificates by the Board of this State.

SECTION 9. *Appeal from Board's Decision.* Any applicant who has been denied examination by the Board may within thirty days after such denial appeal to the circuit court for the county in which the Board has its office; and such court shall upon such appeal inquire into the cause of such denial. If in the opinion of the court admission to examination was refused without just cause, the court may order the board to examine the applicant. Notice of an appeal from the denial of the Board of the right to examination may be served upon any member of the Board by leaving with him or with any adult member of his staff or household, at his usual place of business or abode, an attested copy thereof within thirty days after said Board has notified the applicant of its refusal to examine him. Hearings of such appeals shall proceed in accordance with such rules as the district court may determine.

NOTE: An applicant unlawfully denied admission to examination would have the right without the foregoing provision to the aid of the court in compelling the Board to examine him. The fact that this provision is written into the law, however, will tend to show to those who may believe that they would be denied entrance to examination on the basis of alleged pre-professional or professional education or on other technicality, that they may have their rights protected by the courts.

SECTION 10. *Certificates and Licenses Void.* Any basic sciences certificate and any license to practice the healing art or any branch thereof which is issued contrary to this act shall be void. A board which has issued a license by virtue of a void basic science certificate shall revoke or cancel such license. The procedure for such revocation or cancellation shall be in accordance with the provisions of the act under which such license was issued, for the cancellation or revocation of licenses generally. The certificate issued to any per-

son by the State Board of Examiners in the Basic Sciences shall be automatically revoked by the revocation of any license issued to such person to practice the healing art or any branch thereof.

SECTION 11. *Practice Without Basic Science Certificate Forbidden.* Any person who shall practice the healing art or any branch thereof without having obtained a valid certificate from the State Board of Examiners in the Basic Sciences, except as otherwise authorized by this act, shall be fined not more than one hundred dollars or imprisoned not more than twelve months, or both, in the discretion of the judge.

NOTE: The exception referred to in this section is governed by Section 7 which provides that this Act does not apply to dentists, nurses, midwives and persons licensed to practice the healing arts or any branch thereof at the time this act is passed.

SECTION 12. *Fraudulent Certificates Forbidden.* Any person who shall obtain or attempt to obtain a basic science certificate by any dishonest or fraudulent means, or who shall forge, counterfeit, or fraudulently alter any such certificate, shall be fined not more than five hundred dollars, or imprisoned not more than twelve months, or both, in the discretion of the judge.

SECTION 13. *Fraudulent Licenses Forbidden.* Any person who shall obtain or attempt to obtain a license to practice the healing art or any branch thereof from any board authorized to issue any such license, without presenting to said licensing board a valid certificate issued by the State Board of Examiners in the Basic Sciences, as in this act required, shall be fined not more than five hundred dollars or imprisoned not more than twelve months, or both, in the discretion of the judge.

SECTION 14. *Issue of Fraudulent Licenses Forbidden.* Any person who, knowingly issues or participates in the issue of a license to practice the healing art or any branch thereof to any person who has not presented to the licensing board a valid certificate from the State Board of Medical Examiners in the Basic Sciences, or to any person who has presented to such licensing board any such certificate obtained by dishonesty or fraud, or any forged or counterfeit certificate, shall be fined not more than five hundred dollars, or imprisoned not more than twelve months, or both, in the discretion of the judge.

SECTION 15. *Fees Paid Unauthorized Practitioners Recoverable.* Any money paid out by any person as compensation for services rendered in the practice of the healing art or any branch thereof to any person not legally licensed to practice such healing art or branch, when the payor did not know that such person was not validly licensed so to practice, may be recovered by the person who has paid such money by a suit instituted within two years from the date when such fee or compensation was paid.

NOTE: One who practices the healing art or any branch thereof unlawfully cannot now obtain the aid of the courts in collecting money for his unlawful act. This section proposes merely to permit one who has innocently paid money for such unlawful services to recover it by suit.

SECTION 16. *Enforcement.* The State Board of Examiners in the Basic Sciences and the various boards authorized to issue licenses to practice the healing art or any branch thereof shall investigate any supposed violation of this act and report to the proper county attorney of the causes that in the judgment of such board warrant prosecution. Every police officer, sheriff and peace officer shall investigate all supposed violations of this act and apprehend and arrest all violators thereof. It shall be the duty of the attorney-general and of the several county attorneys to prosecute violations of this act.

NOTE: One difficulty with the enforcement of existing medical practice acts is the fact that the duty of enforcement is not clearly placed. The section set forth above places and distributes the duty in such a manner as to make many State and municipal agencies responsible, including those who are best situated to enforce the law, namely, police officers, sheriffs and peace officers generally.

SECTION 17. *Exceptions.* This act shall not be construed as applying to dentists, nurses, or midwives, practicing within the limits of their respective callings; nor other persons licensed to practice the healing art or any branch thereof in this State when this act takes effect.

SECTION 18. *Saving Clause.* No provision of this act shall be construed as repealing any statutory provision now in force at the time of its passage with reference to the requirements governing the issuing of licenses to practice the healing art or any branch thereof; but any board authorized to issue licenses to practice the healing art or any branch thereof may in its discretion accept certificates issued by the Board of Examiners in the Basic

Sciences in lieu of examining applicants in such sciences or may continue to examine applicants in such sciences as heretofore. The unconstitutionality of any part of this act shall not be construed as invalidating any other part thereof.

SECTION 19. *Short Title.* This act may be cited as "Basic Science Act, 1929."

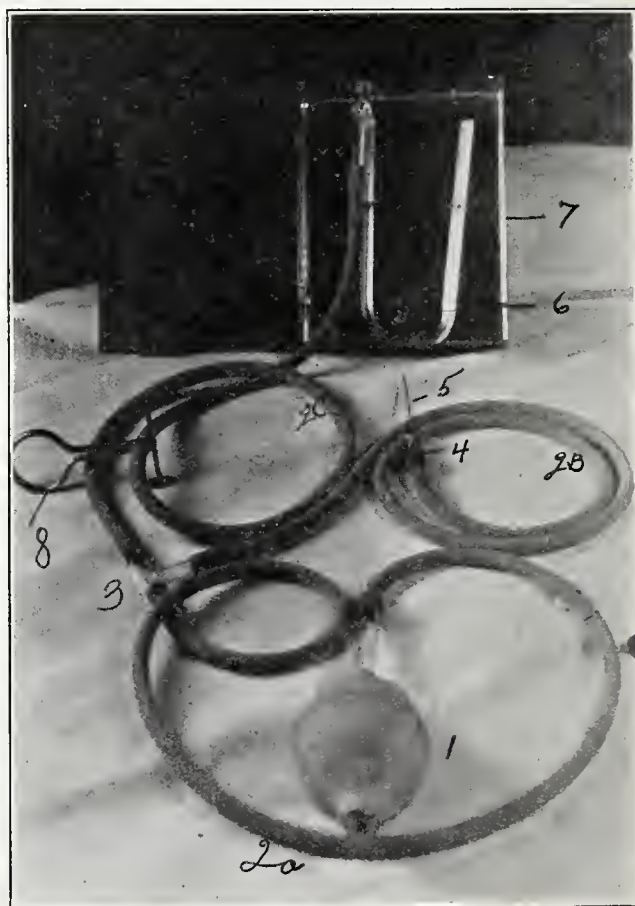
SECTION 20. *Date of Taking Effect.* This act shall take effect and be in force from and after its publication in the Statute Book.

APPARATUS FOR PNEUMOTHORAX REFILLS

By STERLING P. BOND, M. D., F. A. C. S.

The value of pneumothorax will not be considered here inasmuch as it is now a recognized procedure, not only among the medical profession, but also quite a number of the laity understand its value.

One of the chief difficulties has been a cumbersome, complicated apparatus which was used for this operative procedure. The apparatus here described was devised for simplifying the work and lessening the amount of labor.



1. An ordinary blood pressure bulb.
2. (a) Two feet of ordinary tubing.
(b) Two feet of ordinary tubing.
(c) Two feet of ordinary tubing.
3. A glass Y.
4. An ordinary Luer adapter.
5. A twenty-two gage needle.
6. A glass U.
7. A box.
8. A pinchcock or hemostat.

The U is attached to the posterior wall of the box and the apparatus is connected as per diagram. The U-6 is the manometer and is one-half filled with water.

For Use: The apparatus is assembled and the manometer is loaded. The skin, muscle and pleura, anesthetized with two per cent novocain. Needle 5 is inserted through the skin between the ribs and in between the visceral and parietal layers of the pleura with pinchcock 8 open. A negative pressure is obtained in manometer as shown by a fall of water level on open end side of manometer and is evidence of being in pleural cavity. Pinchcock 8 is closed on tube and air is injected by pressing blood pressure bulb. About 30 cc. of air is injected with each emptying of the bulb.

After five or six bulbfulls have been injected, or if the patient complains of sharp pain, the pinchcock is opened and manometer reading is taken. If positive pressure is obtained, operation is complete. If negative pressure still prevails, then the foregoing procedure is repeated. The amount of air taken varies with the patient and is also influenced by the number of adhesions.

Information as to the amount of a compression and whether adhesions hold lung open are obtained by fluoroscopic examination or X-ray picture.

On account of the danger of pleural shock and timidity of patients, we recommend that initial compression be done in a hospital with the larger machine which is of the water pressure and gravity type. Refills may be done with the apparatus here described either at home or at the physician's office.

REPORT OF PATIENT EXHIBITING THREE INFECTIONS WITH SYPHILIS

Charles R. L. Halley, Washington, D. C. (Journal A. M. A., March 10, 1928), reports that his patient, after having had two previous infections with syphilis, acquired a third time a lesion which in every respect suggested a third primary syphilitic infection.

The patient exhibited on the shaft of the penis, a typical chancre, which was so diagnosed clinically without any hesitation; there was also a regional adenitis. In addition, two typical specimens of *Spirochaeta pallida* were demonstrated in the serum from the lesion. A careful inquiry into the history and a thorough physical examination failed to reveal any evidence of syphilis which might have resulted from either of the two previous infections. Furthermore, examination of the blood serum and of the spinal fluid, each taken on the day of admission, did not disclose any signs of syphilis. Hence, this patient was considered as presenting undoubted evidence of a primary syphilitic lesion.

CASE OF INTRASPINAL EXTRADURAL ABSCESS

Neil S. MacDonald, Minneapolis (Journal A. M. A., April 7, 1928), reports the case of a boy, aged 2 years, who, three weeks previously, had had an acute respiratory infection causing an otitis media which ruptured spontaneously and was discharging at the time of the examination. The patient presented a picture of profound septicemia, manifested by the usual accompaniments, such as loss of weight, fluctuating temperature, rapid pulse, sleeplessness and marked discomfort. The following physical signs were obvious: rigidity of the back, thigh and leg muscles, with flexion of the lower limbs and an apparent beginning bilateral foot drop, which was in reality a spastic paraplegia. The patellar reflexes were exaggerated. There was also a deeply palpable inflammatory induration in the dorsolumbar region. A tentative diagnosis of intraspinal pressure, the result of a infectious process, was made and a laminectomy recommended which was performed the following day. The operation disclosed a circumscribed extradural abscess in the dorsolumbar region, a portion of which had escaped through the interlaminar spaces into the adjacent soft parts on the left side underneath the lumbar muscles. Liberal tube drainage was provided and immediate improvement in the general physical condition was obtained. The wound drained freely for a period of approximately two months and eventually closed. The laboratory reported that the infection was due to a staphylococcus of undetermined type. A smear from the ear was not made. The post-operative diagnosis was localized spinal abscess, extradural, the result of meningeal or osteomyelitic infection, probably secondary to an acute infectious process in the middle ear.

THE JOURNAL

OF THE

ARKANSAS MEDICAL SOCIETY

Owned by the Arkansas Medical Society and Published under the direction of the Council.

WILLIAM R. BATHURST, Editor
810-812 Boyle Building, Little Rock, Arkansas.

Published Monthly. Subscription \$3.00 per year; single copies 25 cents.

Entered as scnd-class matter, June 21, 1906, at the postoffice at Little Rock, Arkansas, under the Act of Congress of March 3, 1879.

Acceptance for mailing at special rate of postage provided for in Section 1103, Act of October 3, 1917, authorized August 1, 1918.

The advertising policy of this Journal is governed by the rules of the Council on Pharmacy and Chemistry of the American Medical Association.

All communications of this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the State. Notice of deaths, removals from the state, changes of location, etc., are requested.

OFFICERS OF THE ARKANSAS MEDICAL SOCIETY	
HENRY THIBAUT, President.....	Scott
R. H. T. MANN, President-Elect.....	Texarkana
HOMER SCOTT, First Vice-President.....	Little Rock
J. B. WHARTON, Second Vice-President.....	El Dorado
O. J. T. JOHNSTON, Third Vice-President.....	Batesville
R. J. CALCOTE, Treasurer.....	Little Rock
Wm. R. BATHURST, Secretary.....	Little Rock

COUNCILORS	
First District—W. W. VERSER.....	Harrisburg
Second District—J. L. JONES.....	Searcy
Third District—M. C. JOHN.....	Stuttgart
Fourth District—W. T. LOWE.....	Pine Bluff
Fifth District—L. L. PURIFOY.....	El Dorado
Sixth District—B. C. MIDDLETON.....	Texarkana
Seventh District—DEWELL GANN, SR.....	Benton
Eighth District—ANDERSON WATKINS.....	Little Rock
Ninth District—SAM G. DANIEL.....	Marshall
Tenth District—THOMAS DOUGLASS.....	Ozark

COMMITTEES	
SCIENTIFIC PROGRAM—R. J. Calcote, Little Rock, chairman; A. D. Cathey, El Dorado; O. A. Carruth, Little Rock.	
SCIENTIFIC EXHIBIT—Chas. E. Oates, Little Rock, chairman; O. C. Melson, Little Rock; M. V. Russell, El Dorado.	
STUDENT LOAN FUND—E. F. Ellis, Fayetteville, chairman; Henry Thibault, Scott; Wm. R. Bathurst, Little Rock.	
NECROLOGY—F. A. Corn, Lonoke, chairman; M. C. John, Stuttgart; Geo. B. Fletcher, Hot Springs.	
MEDICAL LEGISLATION—Frank Vinsonhaler, Little Rock, chairman; M. D. Ogden, Little Rock; A. C. Watson, England.	
HEALTH AND PUBLIC INSTRUCTION—John R. Dibrell, Little Rock, chairman; Anderson Watkins, Little Rock; E. L. Watson, Newport.	
CANCER CONTROL—A. M. Zell, Little Rock, chairman; A. A. Gilbert, Fayetteville; W. E. Stallings, Newport.	
INFANT WELFARE—Clinton A. Rice, Rogers, chairman; A. C. Kirby, Little Rock; H. A. Ross, Arkadelphia.	
HOSPITALS—W. G. Eberle, Fort Smith, chairman; J. A. Foltz, Fort Smith; J. W. Butts, Helena.	

Editorials

OUR TWO GREAT NEEDS

HENRY THIBAUT, M. D.

There are two duties of great importance now confronting the Arkansas Medical Society. First, the passage of a basic science law, requiring all applicants for license to practice any form of treatment of disease in human beings to pass a creditable examination in the basic sciences before going before the medical board representing the “school of practice” from which he has graduated.

Second. The perfection of plans and means for the early completion of a State General Hospital, to be used for the benefit of the indigent sick of the State and for the teaching of clinical medicine to the students in the Medical School of the Arkansas University.

No tasks of greater importance have ever confronted the medical profession and the citizens of this State; and if they can be accomplished as assured facts by the time of adjournment of the next Legislature, the Arkansas Medical Society and the people of the State will have good reason to congratulate themselves.

THE BASIC SCIENCE LAW

No one can deny that any one ignorant of the basic sciences, biology, chemistry, toxicology, human anatomy, physiology, bacteriology, histology and pathology, is unfit to practice medicine, no matter by what name he calls it or what school of practice he intends to follow.

After an applicant has passed these fundamental branches he will be free to go before the board representing his school of practice and will not be questioned on methods of practice by men not of his school. Under this act all practitioners will be on the same footing, and if the basic science board is a non-medical one, no one can feel that he is in any way hampered by prejudice.

The Secretary of the Arkansas Medical Society and the Legislative Committee should at once have a petition printed and send a copy to every member of the various County Medical Societies. The form of the petition should be brief and about as follows:

Petition

“We believe that every person desiring to practice any form of healing on human beings should be required to pass an examination in

the following basic sciences before being allowed to take the examination before the board representing his school of practice: Anatomy, physiology, chemistry, bacteriology, pathology and hygiene.

We, all citizens and voters in..... County, Arkansas, therefore pray that the present Legislature pass a law requiring all applicants for license to practice any form of healing of human beings to pass a creditable examination in these basic branches, before a non-medical board before they are examined by the board representing their school of practice.

Signed.....
.....
.....

Each member should be urged to get the signatures of at least ten of his patients to his petition, then sign it himself and mail it to the Secretary or the Chairman of the Legislative Committee.

If this is done the Committee will have some ammunition in their pockets when they approach the Legislature.

The above form of petition is of course tentative and doubtless can be greatly improved by the combined efforts of our Secretary and the Legislative Committee, but the need of its early circulation and the concerted action of the County Medical Societies is urgent and its distribution should not be delayed.

THE STATE GENERAL HOSPITAL

This is not made the second item for consideration because it is of secondary importance. The whole State, the entire medical profession of the State and the Medical School, in particular, are constantly feeling the dire need of this institution. Country doctors are seeing every day the great need for a centrally located charity hospital. They can give their services free to their destitute patients and then see many of them die for the want of proper housing, proper food and competent nursing.

No matter how willing and charitable the doctor, it is humanly impossible for him to furnish all these things. Thousands of these patients have been cold, hungry and miserable and many of them have died in their misery, who could have been saved to become useful citizens of the State if we had had a good State General Hospital. This waste of life and of clinical material is a great loss to the State and is jeopardizing the very existence of our Medical School.

A State General Hospital will be a boon to our indigent sick, an indispensable addition to the facilities for teaching clinical medicine to the students in our Medical School and a real economy to our State. It will have the free services of the best clinicians and specialists that the State affords, and will be the means of turning out experienced clinicians from the Medical School.

Every County Medical Society is urged to hold public meetings and point out to the general public the urgent need of a State General Hospital.

THE LIVER PAD

Yes, Mr. Printer and proofreader, the above caption is correct, so please do not make it "The Liver Pad," under the impression that the writer made an error in spelling or hit the wrong key of his typewriter. This story concerns the rise of the liver of commerce. It affords an example of how the humble may eventually find a place in the stomach if not in the sun. The liver pad has made manufacturers rich; the liver fad promises to do the same for the butcher.

For many years, in fact as long as memory of this generation endures, the liver, as an edible has been regarded as a plebian dish. On the restaurant menu liver and onions, or liver and bacon, has been the cheapest of viands offered to the hungry. It has been the dish of the third rate boarding house, despised by the proud and haughty, even as in the same class as the equally plebian corn beef and cabbage. The butcher was wont, on request, to throw in a bit of liver for the cat with the purchase of a steak or chop. The poor in purse could for a dime get enough liver to feed a family.

And then came the redemption of the liver from its lowly estate. With astounding abruptness it became chief over all meats in price. A food expert discovered that a diet of calf liver made robust, beefy looking people out of pale anemic persons. It made for fat and muscle in short order and the weak became strong over night. The glad news spread abroad through the mighty press, and the demand for liver, hitherto a drug on the market, became active. If one, unacquainted with this meteoric rise of the humble liver should, as of yore, enter a butcher shop and ask for a dime's worth of calf liver, he would get about one bite. By jumps, up went calf liver from seven cents a pound to 15, then, 20, 30, 40, 50,

60 and 70 cents a pound—away higher than choice beef, lamb or veal in war times.

And just as in the grain market reports, we find corn and oats, following wheat upward in stiff markets, so cow's liver partook somewhat of the prosperity of its infant's liver and the market quotation mounted to 30 cents.

But as one star differeth from another star in glory, according to the scripture, so different livers have different grades of glory and price. The liver of the pig has not kept pace with the rise of calf liver. It remains around seven cents. But there are advantages in this fact, the advantage being with the man of the house if he does the marketing, a lady tells hubby she wants some calf liver as she feels anemic. The man, always skeptic, is unable to differentiate the respective glories of liver and takes little stock in the wife's complaint of being anemia's victim. He buys a pound of sliced pig liver for seven cents and pockets the remaining 63 cents. The wife eats of the pig liver, convinced that she is eating liver of the calf and she no longer has symptoms of anemia.

The husband, for obvious reasons, encourages his wife to keep up her calf liver diet at least three times a week. He now smokes better cigars and more of them.

HOSPITAL NUMBER JOURNAL AMERICAN MEDICAL SOCIETY

We wish to call the attention of our readers to the special Hospital Number of the Journal American Medical Association for March 24, which contains the first edition of the American Medical Association Hospital Register.

This report is the result of the special census of hospitals taken within the past few weeks, and the statistics, therefore, are new and not obtainable elsewhere. In addition to information that is of general interest, there are a number of facts concerning the hospital situation in Arkansas. For example, the Arkansas section of the data on page 912 shows that there is a total of 59 general hospitals with a capacity of 2,805 beds and having on the average 1,521 patients, the percentage of occupancy being 54.2 as compared with 66 per cent occupancy for all the general hospitals of the United States. The nervous and mental hospitals of the State number 2, with a capacity of 3,398 and having 3,235 patients.

Going on through the Arkansas section we find similar statistics for each of the other types of hospitals, giving a total of 75 registered hospitals with 7,253 beds and 5,457 patients, plus 188 bassinets or a grand total capacity of 7,441 beds for all the hospitals in the State.

Turning a leaf, you will find on page 914 complete statistics for each of the different agencies that control hospitals within the State. Data of interest are found on pages 918 and 919, and especially on page 924 where there is a complete list of all the hospitals in Arkansas that are admitted to the American Medical Association Hospital Register, giving the name and location of the hospital; the type of service rendered; the capacity; the average number of patients; whether the hospital is approved for the training of interns; for residencies in specialities, and whether approved by the American College of Surgeons. Its status regarding nurse training is also indicated. You will observe that one hospital in Arkansas is approved for internships by the Council on Medical Education and Hospitals. Five hospitals with a capacity of 92 beds were not admitted to the Register.

A list of five approved clinical laboratories in the State is printed on page 981.

RESOLUTIONS OF RESPECT ON THE DEATH OF DR. HUGH H. HENRY

Whereas, Almighty God in His Divine Providence, has seen fit to call from our midst our fellow practitioner, Dr. Hugh H. Henry; and

Whereas, our fellow physician, Dr. Hugh H. Henry, during the many years that he has followed his profession in this community, has always conducted himself in accordance with the highest standards and ethics of his profession; and

Whereas, our friend and associate Dr. Hugh H. Henry at all times was highly respected by fellow members of his profession and by all who knew him.

Therefore, Be It Resolved, by the Ouachita County Medical Society, that we, as a society, feel that we have lost one of our best members and wish to extend our sincerest sympathy to the family.

Respectfully submitted,
The Ouachita County Medical Society.
R. B. Robins, M. D., Sec.

Announcements and Program

Fifty-third Annual Session of the ARKANSAS MEDICAL SOCIETY and Fourth Annual Session Woman's Auxiliary

OFFICERS

President—Henry Thibault, Scott.
President-Elect—R. H. T. Mann, Texarkana.
First Vice-President—Homer Scott, Little Rock.
Second Vice-President—J. B. Wharton, El Dorado.
Third Vice-President—O. J. T. Johnston, Batesville.
Secretary—William R. Bathurst, Little Rock.
Treasurer—R. J. Calcote, Little Rock.

COUNCILORS AND COUNCILOR DISTRICTS

First District—Clay, Crittenden, Craighead, Greene, Lawrence, Mississippi, Poinsett and Randolph Counties. Councilor, W. W. Verser, Harrisburg. Term of office expires 1929.

Second District—Cleburne, Fulton, Independence, Izard, Jackson, Sharp and White Counties. Councilor, J. L. Jones, Searcy. Term of office expires 1928.

Third District—Arkansas, Cross, Lee, Lonoke, Monroe, Phillips, Prairie, St. Francis and Woodruff Counties. Councilor, M. C. John, Stuttgart. Term of office expires 1929.

Fourth District—Ashley, Bradley, Chicot, Cleveland, Drew, Desha, Jefferson and Lincoln Counties. Councilor, W. T. Lowe, Pine Bluff. Term of office expires 1928.

Fifth District—Calhoun, Columbia, Dallas, LaFayette, Ouachita and Union Counties. Councilor, L. L. Purifoy, El Dorado. Term of office expires 1929.

Sixth District—Hempstead, Howard, Little River, Miller, Nevada, Pike, Polk and Sevier Counties. Councilor, B. C. Middleton, Texarkana. Term of office expires 1928.

Seventh District—Clark, Garland, Grant, Hot Spring, Montgomery, Saline and Scott Counties. Councilor, Dewell Gann, Sr., Benton. Term of office expires 1929.

Eighth District—Conway, Faulkner, Johnson, Perry, Pope, Pulaski and Yell Counties. Councilor, Anderson Watkins, Little Rock. Term of office expires 1928.

Ninth District—Baxter, Boone, Carroll, Marion, Newton, Searcy, Stone and Van Buren Counties. Councilor, Sam G. Daniel, Marshall. Term of office expires 1929.

Tenth District—Benton, Crawford, Franklin, Logan, Madison, Sebastian and Washington Counties. Councilor, Thomas Douglass, Ozark. Term of office expires 1928.

Delegates to the A. M. A.—William R. Bathurst, Little Rock (1929); H. D. Wood, Fayetteville (1928).

COMMITTEES

SCIENTIFIC PROGRAM

R. J. Calcote, Little Rock, Chairman; A. D. Cathey, El Dorado; O. A. Carruth, Little Rock.

SCIENTIFIC EXHIBIT

Chas. E. Oates, Little Rock, Chairman; O. C. Melson, Little Rock; M. V. Russell, El Dorado.

MEDICAL LEGISLATION

Frank Vinsonhaler, Little Rock, Chairman; M. D. Ogden, Little Rock; A. C. Watson, England.

STUDENT LOAN FUND

E. F. Ellis, Fayetteville, Chairman; Henry Thibault, Scott; Wm. R. Bathurst, Little Rock.

NECROLOGY

F. A. Corn, Lonoke, Chairman; M. C. John, Stuttgart; Geo. B. Fletcher, Hot Springs.

HEALTH AND PUBLIC INSTRUCTION

John R. Dibrell, Little Rock, Chairman; Anderson Watkins, Little Rock, E. L. Watson, Newport.

CANCER CONTROL

A. M. Zell, Little Rock, Chairman; A. A. Gilbert, Fayetteville; W. E. Stallings, Newport.

INFANT WELFARE

Clinton A. Rice, Rogers, Chairman; A. C. Kirby, Little Rock; H. A. Ross, Arkadelphia.

HOSPITALS

W. G. Eberle, Fort Smith, Chairman; J. A. Foltz, Fort Smith; J. W. Butts, Helena.

ANNOUNCEMENTS

REGISTRATION

The registration desk will be located in the Convention Hall, adjoining the Randolph Hotel and open from 8:00 a. m. to 5:00 p. m.

The delegates are requested to register as early as possible, so that the official roll of the House may be made up and that the House of Delegates may proceed with its business, beginning promptly at 9:30 a. m. Members and visiting ladies are also requested to register and receive the official badge and program.

The members of the Woman's Auxiliary will also please register and receive a program and the official badge of their organization.

HOST: UNION COUNTY MEDICAL SOCIETY

President—J. M. Sheppard.

Secretary-Treasurer—G. D. Murphy.

COMMITTEES

Arrangements: H. H. Niehuss, Chairman; L. L. Purifoy and J. G. Mitchell.

Entertainment: J. B. Wharton, Chairman; J. C. Falvey, T. J. Bush and A. M. Mayfield.

Publicity: G. D. Murphy, Chairman; J. E. Guthrey, J. F. Tanner and W. W. Thrower.

Public Session: F. O. Mahony, Chairman; Gordon Hastings and F. L. Irby.

Memorial Session: J. K. Sheppard, Chairman; W. L. Wozencraft, G. C. De Bolt and F. P. Vines.

Commercial Exhibits: D. E. White, Chairman; M. V. Russell, A. D. Cathey and J. W. Nolan.

Scientific Exhibits: David LeVine, Chairman; J. V. Ferguson, C. G. Engle, W. L. Patterson.

Finance: J. A. Moore, Chairman; S. J. McGraw, E. J. Munn and J. W. Slaughter.

COMMERCIAL EXHIBIT

(D. E. White, in charge)

Several high-class commercial exhibits will be on display and our members are urged to visit this interesting exhibit of books, instruments, office equipment and products of many manufacturing plants.

SCIENTIFIC EXHIBIT

This exhibit will be conducted by the Committee on Scientific Exhibits, Chas. E. Oates, Chairman; O. C. Melson and M. V. Russell. Our members are urged to attend and lend their support to the committee's labors and assist in developing this attractive addition at our meetings.

HYGEIA EXHIBIT

The Woman's Auxiliary will have charge of the exhibit of the health magazine, *Hygeia*, published by the American Medical Association. Your subscription will be solicited.

PROGRAM OF ENTERTAINMENT

Tuesday, May 1—8:00 P. M.
Public Session—High School Auditorium.

Wednesday, May 2—8:30 A. M.
Memorial Session—First Baptist Church.

(Members and ladies are invited to attend the Memorial Services, 8:30 to 9:30 A. M.)

Wednesday, May 2—8:00 P. M.

President's Reception—Randolph Hotel.

Musical Program.

Dancing.

Automobile rides over the city and oil fields.

Special Vaudeville at the Majestic Theatre during the three days of the Convention.

The El Dorado Athletic Club announce the arrangement for a good prize fight for the evening of May 2.

GOLF TOURNAMENT

The El Dorado Golf and Country Club.

The Dewell Gann Loving Cup is the prize for the high score in golf at all State Meetings.

CIVIC CLUBS

The following civic clubs will meet during the session and have extended a cordial invitation to the visiting members of these respective clubs who attend the State Medical Convention:

Tuesday Noon—Lions Club, Randolph Hotel.

Wednesday Noon—Rotary Club, Garrett Hotel.

Auxiliary Program

Fourth Annual Meeting Woman's Auxiliary
of the Arkansas Medical Society

OFFICERS

President—Mrs. Chas. Travis Drennen, Hot Springs.

President-Elect—Mrs. T. G. Porter, Hazen.

Vice-President—Mrs. C. G. Hinkle, Batesville.

Secretary—Mrs. E. L. Thompson, Hot Springs.

Publicity Secretary—Mrs. B. A. Rhinehart, Little Rock.

Treasurer—Mrs. J. M. Phillips, Benton.

Parliamentarian—Mrs. S. A. Collom, Texarkana.

Historian—Mrs. C. W. Garrison, Little Rock.

DIRECTORS

Mrs. Grayson Tarkington, Hot Springs.

Mrs. Charles E. Oates, Little Rock.

Mrs. R. H. T. Mann, Texarkana.

Mrs. P. E. Thomas, Sr., Clarendon.

PAST PRESIDENTS

Mrs. C. W. Garrison, Little Rock.

Mrs. Dewell Gann, Sr., Benton.

COMMITTEES

Organization: Mrs. C. G. Hinkle, Chairman; Mrs. P. E. Thomas, Sr., Clarendon; Mrs. E. A. Callahan, Carlisle; Mrs. G. C. DeBolt, El Dorado; and Mrs. E. F. Ellis, Fayetteville.

Education and Public Health: Mrs. J. H. Chesnutt, Hot Springs, Chairman; Mrs. J. B. Wharton, El Dorado; Mrs. Dewell Gann, Sr., Benton; Mrs. A. E. Chace, Texarkana and Mrs. A. M. Kitchens, Waldo.

Constitution and By-Laws—Mrs. S. A. Collom, Texarkana, Chairman.

Memorial—Mrs. L. D. Reagan, Little Rock, Chairman; Mrs. G. S. Brown, Conway, and Mrs. J. R. Lynn, Hazen.

Public Relations—Mrs. C. W. Garrison, Little Rock, Chairman; Mrs. J. H. Kennerly, Batesville; Mrs. Wm. R. Bathurst, Little Rock; Mrs. S. A. Drennen, Stuttgart and Mrs. C. A. Archer, DeQueen.

Music: Mrs. L. L. Purifoy, El Dorado, Chairman; Mrs. W. R. Richardson, Little Rock and Mrs. George B. Fletcher, Hot Springs.

HOST: AUXILIARY, UNION COUNTY
MEDICAL SOCIETY

President—Mrs. J. B. Wharton, El Dorado.

COMMITTEE ON ENTERTAINMENT

Mrs. J. G. Mitchell, Chairman

Mrs. G. D. Murphy

Mrs. L. L. Purifoy

Mrs. A. M. Mayfield

Mrs. T. J. Bush

Mrs. F. O. Mahony

Mrs. J. W. Slaughter

Mrs. W. W. Thrower

Mrs. D. E. White

Mrs. I. M. George

Mrs. J. A. Moore

Mrs. H. H. Niehuss

Mrs. G. C. DeBolt

Mrs. M. V. Russell

Mrs. J. M. Sheppard

Mrs. A. D. Cathey

Mrs. J. K. Sheppard

Mrs. Frank Vines

Mrs. J. E. Guthrey

Mrs. David Levine

Mrs. S. J. McGraw

COMMITTEE ON REGISTRATION

Mesdames T. J. Bush, J. A. Moore, David Levine.

PROGRAM

Tuesday, May 1—9:00 A. M.

Registration—Lobby of Randolph Hotel.

10:00 to 12:00 A. M.

Executive Board Meeting.

Mezzanine, Randolph Hotel.

Tuesday Afternoon—3:30 to 5:00

TEA—At the home of Mrs. Lawrence L. Purifoy, 508 Champagnolle Street, in honor of guests and members.

HOSTESS: Union County Auxiliary.

Tuesday Evening—8:00

Public Session of the Arkansas Medical Society, High School Auditorium.

Wednesday, May 2—8:30 to 9:30

Memorial Session—Arkansas Medical Society.

BUSINESS SESSION

Randolph Hotel

Wednesday Morning—10:00 to 12:00

Delegates of Woman's Auxiliary will attend this meeting and visiting ladies are invited to attend all sessions of the Auxiliary.

Meeting called to order by President, Mrs. Chas. Travis Drennen, Hot Springs.

Invocation—Dr. Frank Roland Dudley, Pastor First Presbyterian Church.

Presentation of President and President-Elect, Arkansas State Medical Society.

Presentation of President, Southern Medical Association.

REPORT OF COMMITTEES

Secretary—Mrs. E. L. Thompson, Hot Springs.

Treasurer—Mrs. J. M. Phillips, Benton.

Program—Mrs. J. B. Wharton, El Dorado.

Entertainment—Mrs. J. G. Mitchell, El Dorado.

Organization—Mrs. C. G. Hinkle, Batesville.

Finance—Mrs. A. H. Tribble, Hot Springs.

Education and Public Health—Mrs. James Chesnutt, Hot Springs.

Public Relations—Mrs. J. H. Kennerly, Batesville.

Constitution and By-Laws—Mrs. S. A. Collom, Texarkana.

Memorial—Mrs. L. D. Reagan, Little Rock.

Music—Mrs. L. L. Purifoy, El Dorado.

HYGEIA—Mrs. E. L. Thompson, Hot Springs.

Report of Delegates to Woman's Auxiliary of the American Medical Association.

REPORT OF COUNTY AUXILIARIES

Garland County—Mrs. Grayson Tarkington, Hot Springs.

Miller County—Mrs. L. H. Lanier, Texarkana.

Prairie County—Mrs. F. A. Hipolite, DeValls Bluff.

Saline County—Mrs. J. M. Phillips, Benton.

Woodruff County—Mrs. J. W. Morris, McCrory.

Pulaski County—Mrs. J. C. Cunningham, Little Rock.

Arkansas County—Mrs. M. C. John, Stuttgart.

Faulkner County—Mrs. Geo. S. Brown, Conway.

Independence County—Mrs. C. G. Hinkle, Batesville.

Columbia County—Mrs. G. F. McLeod, Magnolia.

Mississippi County—Mrs. Thos. F. Hudson, Luxora.

Union County—Mrs. J. B. Wharton, El Dorado.

Report of Nominating Committee.

Election of Officers.

GENERAL SESSION

Wednesday—1:30 P. M.

Luncheon.

Vocal Solo—James Wharton, El Dorado.

Piano Solo.

Vocal Solo—Mrs. George B. Fletcher, Hot Springs.

Meeting called to order by the President, Mrs. Chas. Travis Drennen, Hot Springs.

Address of Welcome—Mrs. J. B. Wharton, President, Union County Auxiliary.

Response—Mrs. S. A. Drennen, Stuttgart.

Greetings from Woman's Auxiliary, Southern Medical Association—Mrs. C. W. Garrison, Little Rock, President-Elect.

Greetings from Garland County Auxiliary—Mrs. S. B. Steele, Hot Springs.

President's Address—Mrs. Chas. Travis Drennen, Hot Springs.

Introduction of President for 1928-1929—Mrs. T. G. Porter, Hazen.

Adjournment.

Wednesday—8:00 P. M.

President's Reception—Randolph Hotel.

FIFTY-THIRD ANNUAL SESSION OF THE ARKANSAS MEDICAL SOCIETY

HOUSE OF DELEGATES

First Meeting—Convention Hall

The regular annual meeting of the House of Delegates of the Arkansas Medical Society will be held on May 1, 9:30 A. M.

Henry Thibault, President.

Wm. R. Bathurst, Secretary.

Meeting called to order by Henry Thibault, president.

Appointment of the Credentials Committee and their report.

Calling roll of Delegates.

Adoption of the Minutes of the Fifty-Second Annual Meeting as published in the July issue of the Journal of the Arkansas Medical Society.

Appointment of Reference Committee.

President's Address to the House of Delegates.

REPORT OF COMMITTEES

Scientific Program—R. J. Calcote, Chairman.

Scientific Exhibit—C. E. Oates, Chairman.

Medical Legislation—Frank Vinsonhale, Chairman.

Necrology—F. A. Corn, Chairman.

Health and Public Instruction—John R. Dibrell, Chairman.

Cancer Control—A. M. Zell, Chairman.

Infant Welfare—Clinton A. Rice, Chairman.

Hospitals—W. G. Eberle, Chairman.

Arrangements and Entertainment—H. H. Niehuss, Chairman.

Report of the Council—Dewell Gann, Sr., Chairman, and Thos. Douglass, Secretary.

Report of the State Board of Examiners—J. W. Walker, Secretary.

Report of the Delegates to the A. M. A.

Report of the Secretary.

Report of the Treasurer.

New Business.

Selection of the Nominating Committee.

Proposed change in Constitution and By-Laws to be voted on at the El Dorado meeting:

RESOLVED, That the Constitution and By-Laws be amended so as to include a Publicity Committee.

THEREFORE, The following amendment is proposed to add to Chapter VIII, Section 1, page 19, to include among the standing committees, that of "A Committee on Publicity."

MEETING OF THE COUNCIL

The Council of the Arkansas Medical Society will meet at noon with luncheon in the private dining room, Hotel Randolph, immediately following the adjournment of the morning session.

GENERAL SESSION

Convention Hall

Tuesday, May 1—1:30 P. M.

Calling of the Society to Order—Henry Thibault, President.

Invocation—Dr. J. D. Hammons, Pastor, First Methodist Church, El Dorado.

Address of Welcome for El Dorado—Honorables J. R. Wilson, Mayor, El Dorado.

Address of Welcome for the Union County Medical Society—H. H. Niehuss, Chairman, Committee on Arrangements.

Response to the Address of Welcome on behalf of the Arkansas Medical Society—George B. Fletcher, Hot Springs.

President's Annual Address—Henry Thibault, Scott.

Introduction of Fraternal Delegates.

SCIENTIFIC SESSION

Address—Dr. Jabez N. Jackson, Kansas City, President of the American Medical Association.

"Heart Failure"—Neuton S. Stern, Memphis.

"Care and Treatment of Cleft Palate and Lips" (Lantern Slide Demonstration), F. W. Carruthers, Little Rock.

"Surgical Conditions in the Upper Right Quadrant of the Abdomen"—J. S. Stell, Hot Springs.

"Acute Suppurative Parotitis"—George V. Lewis, Little Rock.

"Tetanus, With Report of a Case"—A. G. Harrison, Searcy.

PUBLIC SESSION

High School Auditorium

Tuesday, May 1—8:00 P. M.

Conducted by the Committees on Medical Legislation and Health and Public Instruction.

Calling of the Session to Order—Frank Vinsonhaler, Little Rock.

Invocation and Short Address—Dr. C. E. Dicken.

An Impersonation—Mrs. R. D. Ruhlman.

Solo—Mrs. S. E. Babb.

"The Relation of the Medical Profession to the Laity"—Dr. Henry Boswell, Sanatorium, Mississippi.

MEMORIAL SESSION

First Baptist Church

Wednesday, May 2—8:30 to 9:30 A. M.

Conducted by the Committee on Necrology—F. A. Corn, Chairman; M. C. John and Geo. B. Fletcher.

Invocation—Dr. W. H. Knight, Pastor, First Baptist Church.

Violin Solo—Mr. M. Bernstein.

Vocal Solo—Minor Craig.

Piano Solo—Mrs. C. L. Cliburn.

Quartette—Mrs. H. C. Bull, 1st Soprano; Mrs. James Gilbert, 2nd Soprano; Mrs. W. H. Knight, 1st Alto; Mrs. S. E. Babb, 2nd Alto.

DECEASED MEMBERS

Leander H. Morphew, Stuttgart, June 16, 1927.

Henry E. Williams, Sr., Pine Bluff, June 23, 1927.

William B. Lawrence, Batesville, July 5, 1927.

Corbin D. Stevens, Magnolia, August 4, 1927.

George W. Granberry, Cabot, August 9, 1927.

John Richard Dale, Texarkana, August 25, 1927.

George Washington Floyd, Western Grove, August 25, 1927.

Robert Lee Harris, Hope, September 8, 1927.

Otey Miller, Fayetteville, September 18, 1927.

James Henry Phipps, Clarendon, September 27, 1927.

Absolom S. Baker, Snowball, October 3, 1927.

John Morgan Phillips, Benton, October 19, 1927.

Carl Finch, McCrory, November 9, 1927.

Lorenzo D. Horn, Egypt, November 18, 1927.

Frederick Emerson Allen, Little Rock, November 23, 1927.

Benjamin McCrary Witt, Little Rock, December 5, 1927.

Charles V. Scott, Little Rock, January 8, 1928.

Hugh H. Henry, Camden, January 21, 1928.

K. W. King, Bradford, January 31, 1928.

William F. Saner, Hope, February 28, 1928.

Thomas Madison Morgan, El Dorado, March 7, 1928.

SCIENTIFIC SESSION

Convention Hall

Wednesday, May 2—10:00 A. M.

"Conservative Treatment of Hydronephrosis"—H. W. E. Walther, New Orleans.

"Treatment of Urinary Retention"—J. M. Butts, Helena.

"Renal Infection Complicating Pregnancy"—H. F. H. Jones, Little Rock.

"Relation of the Surgeon to the Specialist"—E. L. Beck, Texarkana.

"Cancer of the Skin"—R. Q. Patterson, Little Rock.

AFTERNOON SESSION

1:30 P. M.

"Diagnosis and Treatment of Paranasal Sinus Infection in Children"—Edward Clay Mitchell, Memphis.

"Maxillary and Sphenoid Sinusitis"—Robert Caldwell, Little Rock.

"Histopathology and Treatment of Chronic Cervicitis," lantern slide demonstration—Dewell Gann, Jr., Little Rock.

"Cancer of the Cervix"—A. B. Carney, Fort Smith.

"Abuse of Cathartics in the Acute Abdomen"—W. T. Lowe, Pine Bluff.

"Malaria"—S. J. McGraw, El Dorado.

"Puerperal Sepsis with Special Consideration of the Use of Anti-Streptococcic Serum"—G. E. Cannon, Hope.

"Synergistic Anesthesia in Obstetrics"—C. B. Billingsley, Fort Smith.

PRESIDENT'S RECEPTION
Wednesday, May 2—8:00 P. M.
Randolph Hotel

Musical Entertainment.
Dancing.

SCIENTIFIC SESSION
Convention Hall

Thursday, May 3—8:30 A. M.

"The Failure of the Physical or the X-Ray Examination to Reveal the Beginning of Tuberculosis in the Lung, and Their Failure to Show the Full Extent of the Pathology Verified by Autopsy"—S. E. Thompson, Kerrville, Texas.

"Treatment of Tuberculosis"—A. C. Shipp, Little Rock.

"Mortality in Appendicitis, Its Causes and Prevention"—A. F. Hoge, Fort Smith.

"Non-Organic Colitis, With Lantern Slide Demonstration"—B. A. Rhinehart, Little Rock.

"An Unusual Case of Injury to the Glottis"—H. H. Rightor, Helena.

"Etiology and Symptoms of Intestinal Obstruction"—P. W. Lutterloh, Jonesboro.

FINAL MEETING OF THE HOUSE OF
DELEGATES

Convention Hall

Thursday, May 3—1:30 P. M.

Roll Call.

Report of the Nominating Committee.

Election of Officers.

President-Elect, First Vice-President, Second Vice-President, Third Vice-President, Secretary, Treasurer, Five Councilors.

Report of Committees.

Further New Business.

Adjournment.

FINAL GENERAL SESSION

(Thursday afternoon, May 3, immediately after adjournment of the House of Delegates).

Calling meeting to order—Henry Thibault, president.

Unfinished Business.

Presentation of President and President-Elect.

New Business.

Selection of Place for Next Meeting.

Adjournment.

Personal and News Items

At a recent meeting for the Alumni of the St. Louis City Hospital, the Medical Society of the St. Louis City Hospital was re-organized and any ex-internes are reinstated in good standing on payment of this year's dues.

A social meeting is planned for June, 1928, the exact date of which all members will be notified later. A Roster of living members from 1875 to 1928 is now being arranged. All members in outlying States are requested to communicate with Dr. William T. Coughlin, President or Dr. J. J. Burdick, Secretary, 2106 East Grand Blvd., St. Louis, Mo.

A meeting of the Woman's Auxiliary of the Pulaski County Medical Society was held March 21, at the Woman's Club, Little Rock, with Mrs. C. E. Oates as host. Mrs. J. C. Cunningham, President, presided over an interesting business meeting during which it was decided that the auxiliary would sponsor a silver tea to be given for the benefit of the Baptist Hospital. After the business session a splendid program was presented. Mrs. Fred Stewart gave a talk on the pre-school child, and voice numbers were given by Henry Sanderson, and readings by Miss Helen Rose. Refreshments were served.

Dr. Glen M. Holmes has been appointed chief of staff of the Arkansas Children's Hospital, Little Rock.

When the proposed city hospital at Helena is completed in the fall, a large addition will be made to the hospital facilities of the State. The hospital, which is to be built and operated by the city, will be three stories high and will contain 70 beds. Modern operating room and X-ray equipment will be installed.

At the Twenty-third Annual Session of the Tri-State Medical Association, comprising the States of Louisiana, Arkansas and Texas, the following officers were elected: President, Guy A. Caldwell, Shreveport, La.; Vice-President for Louisiana, S. C. Barrow, Shreveport; Vice-President for Arkansas, M. L. Norwood, Lockesburg; Vice-President for Texas, W. G. Hartt, Marshall; Secretary-Treasurer, Frank Walke, Shreveport, La.; and Councilors, A. S. Buchanan, Prescott, Ark.; A. C. Smith, Texarkana, Texas, and R. G. Douglas, Shreveport, Louisiana.

The 1929 meeting will be held in Texarkana.

Dr. P. W. Lutterloh has returned from the Mayo Clinic and the Cleveland Clinic where he has spent some time doing post work in

Surgery. Dr. Lutterloh was glad to get back into a warmer climate and stated that Arkansas looked mighty good to him. The Doctor has always been an active booster for advanced medicine in the State, which is shown by his election to the Chairmanship of the Tri-State Section of the A. C. of S. also as District Surgeon to the Cotton Belt and Frisco Railways and as Secretary to the Craighead County Medical Society.

Governor Parnell, accompanied by Dr. Frank Vinsonhaler, Dean of the University of Arkansas Medical School, and E. J. Bodman, member of the Board of Trustees recently inspected the Isaac Folsom Clinic, Second and Sherman Streets.

Efficiency of the methods of handling cases which come to the clinic, and the extensive health program carried on by the organization were commended by the governor, who showed great interest in the explanation by the physicians of different types of cases in the 15 departments of the institution.

All work done at the Folsom Clinic is supervised by specialists, instructors in the University of Arkansas Medical School. Students in their third and fourth years at the Medical School receive part of their instruction at the clinic by making observations of cases.

Examination, laboratory work, treatment and advice given by the staff of fifteen physicians, specialists in their departments, are given free to patients. Nurse service is supervised by Graduate Nurse Edith Hopkins. Several Little Rock hospitals supply nurse service. The clinic is open from 12:30 to 3 p. m. daily. Only ambulatory cases are treated.

During March, a total of 1,981 persons received treatment.

Drs. A. M. Elton and M. L. Harris of Newport, announces the completion of the Newport Sanitarium. The building, formerly used for the Elks Club, has been enlarged and remodeled.

Dr. A. A. Hughes announces the removal of his office from Physicians and Surgeons Clinic to 311 National Building, Pine Bluff.

WANTED—Salaried appointments for **Class A physicians** in all branches of the medical profession. Let us put you in touch with the best man for your opening. Our nation-wide connections enable us to give superior service. Aznoe's National Physicians' Exchange, 30 North Michigan, Chicago. Established 1896. Member the Chicago Association of Commerce.—(Adv).

FOR SALE—Retiring—Splendid location for a physician. Will sell drug store at a fair price. Invoice \$3,000.00. Will also sell or rent store building and seven room residence. Salaried position on railroad can be transferred. Collections good. Location, Central Kansas. One of the best Counties in State. Address: Kansas, Care of Journal, Arkansas Medical Society.

Obituary

DAVIDSON, ALEXANDER—Dr. Alexander Davidson, aged 71, died suddenly following a heart attack March 6, 1928, at his home in Camden. Dr. Davidson was a graduate of the Memphis Hospital Medical College, class of 1900. He had practiced medicine in Camden since 1902, and was Chief of Staff at the Camden Hospital. He is survived by his wife and two daughters, Mrs. J. B. Benson and Mrs. J. L. Holt, both of Camden.

County Societies

SEBASTIAN COUNTY

(Reported by C. S. BUNGART, Sec.)

The Sebastian County Medical Society met at 7:30 p. m., March 12 at the Goldman Hotel. Doctor Ray M. Balyeat, of Oklahoma City, was the essayist of the evening. His subject was "Allergy in Relation to Hay Fever, As-

thma and Allied Diseases," with lantern slide demonstration.

Ethical question for discussion: "Is it ethical for a physician to care for a criminal abortion case?" There was a good deal of discussion of this question.

Present: E. C. Moulton, H. Moulton, H. H. Smith, J. D. Southard, J. S. Southard, Eugene Stevenson, Elmer Stevenson, S. P. Stubbs, J. M. Taylor, Cons. P. Wilson, S. J. Wolfermann, D. W. Goldstein, C. E. Benefield, J. H. Benefield, C. B. Billingsley, A. A. Blair, J. H. Buckley, C. S. Bungart, A. S. Chapman, St. Cloud Cooper, H. C. Dorsey, Walter G. Eberle, E. G. Epler, M. E. Foster, Wayne Freer, Arthur Hoge, Chas. S. Holt, George F. Hynes, T. E. Jeffery, J. Jeffery, I. F. Jones, N. D. McCormack, C. S. Means, W. F. Rose, Paul McConnell, Booneville, Thomas Douglass, Ozark; Dr. Collins, Panama, Okla.; Dr. Cheek, Sallisaw; Dr. Morris, Sallisaw; J. A. Wigley, Mulberry; M. R. Reves, Alma; Dr. Bryan of Vian, Okla.; Harry Cooper of Honolulu and C. W. Hall of Greenwood.

CHICOT COUNTY

(Reported by W. D. EASTERLING, Sec.)

The Chicot County Medical Society met March 16, in Lake Village. The President, E. Baker, being unable to attend, J. S. Wilson presided.

Present: Clark, Craig, Douglas, W. W. Easterling, W. D. Easterling, McGehee and Wilson. Visitor: E. C. Mason of Russellville.

Officers elected for 1928 as follows: President, W. A. Craig; Secretary, W. D. Easterling; Delegate to the Arkansas Medical Society, E. P. McGehee; Alternate, W. W. Easterling.

Dr. Wilson called attention to the National regulations concerning the sale of lye. He discussed the treatment of lye poisoning and stressed the importance of early treatment to prevent esophageal stricture and stenosis.

Dr. Mason of the U. S. Trachoma Hospital at Russellville, told of the prevalence of trachoma, and discussed its etiology, diagnosis and treatment. Also referred to the present inadequate hospital facilities to care for these cases.

The Society endorsed the proposed removal of this hospital to Little Rock.

Our next meeting will be held on the second Thursday night in April.

OUACHITA COUNTY

(Reported by R. B. ROBINS, Sec.)

The Ouachita County Medical Society met in regular session at the Camden Hospital Thursday evening, March 1st. Dr. J. S. Rinehart, Vice-President, presided over the meeting which opened with a delightful banquet served in the sun-parlors by the nurses of the hospital.

The following officers were re-elected to serve for another year:

President, J. S. Thompson; Vice-President, J. S. Rinehart; Secretary-Treasurer, R. B. Robins; Delegate to Annual Meeting, S. A. Thompson; Alternate, S. D. McGill.

The program, one of the best ever presented by the society, consisted of illustrated talks by Drs. Gann, Jones and Rhinehart of Little Rock.

"Treatment of Cervicitis," Dewell Gann, Jr.; "Ureteral Stones," H. Fay H. Jones, "Lung Pathology," D. A. Rhinehart.

Members present at the meeting were: Rinehart, Robins, Jameson, McGill, Early, Powell, Purifoy, Rushing, Word, Wooldridge, Clements, James, Byrd, Sam Thompson and Sanders.

BENTON COUNTY

(Reported by C. S. WILSON, Sec.)

The regular meeting of the Benton County Medical Society for March was held in Siloam Springs. President Clemmer presiding.

Present: Atkinson, Clemmer, Duckworth, Duncan, Greene, Harrison, Highfill, T. E. Hodges, Koobs, Love, Lindsey, McNeil, Moore, Rice, Scott, Smiley and Wilson.

Visitors: F. T. H'Doubler, F. B. Camp, A. W. Gifford, and M. J. Busiek of Springfield, Mo.; Jas. R. McVay of Kansas City, Mo.; I. W. Rogers of Watts, Okla.; H. D. Wood of Fayetteville.

The following scientific program was rendered:

"Diagnosis and Treatment of Peptic Ulcer" by Dr. Jas. R. McVay of Kansas City, Mo.

"The Fauical Tonsil" by Dr. H. J. G. Koobs of Rogers.

ST. FRANCIS COUNTY

(Reported by J. O. RUSH, Sec.)

The St. Francis County Medical Society met in Forrest City, March 6, 1928. The meeting was a called session to elect officers

for the ensuing year, there not having been a quorum at the annual meeting held in February. Dr. A. B. Caldwell, presiding.

Present: Caldwell, Bogart, Boggan, Brown, Rush, McClendon, Powell.

Officers elected: President, P. P. Boggan; Vice-President, H. L. McClendon, Secretary-Treasurer, J. O. Rush; Delegate to the annual meeting, H. L. McClendon; Alternate, N. C. McCown.

It was agreed that the secretary should make an effort to get the physicians in Wynne, Brinkley and Marianna to meet jointly with St. Francis County each month, in one of these towns, and make a live district society. It was agreed that there were scarcely enough physicians in any one of these counties to make an interesting meeting.

The next meeting will be held the first Tuesday in April, provided an agreement is not reached to form a joint society.

JEFFERSON COUNTY

(Reported by J. C. Beard, Sec.)

The Jefferson County Medical Society had a real "get-together" meeting at the Jefferson County Health Unit, Tuesday evening, April 3d. Dr. Hankinson presided.

Dinner was served by Dr. and Mrs. Geo. Hays. During the dinner hour, an orchestra furnished music.

Present: Lowe, Colquitt, Lemons, Gurney, Simmons, John, Wallin, Clark, Cunningham, Capel, Higinbotham, Hays, Woodul, Luck and Beard.

Visiting physicians were: Wm. R. Bathurst, Little Rock; C. W. Dixon, Gould; A. Isom, Dumas; and Guy A. Caldwell, Shreveport, La.

Dr. Bathurst was the principal speaker of the evening. He stressed the importance of "Birthday examinations" for everyone, including the doctors and their families. He emphasized the need of a law requiring every man who contemplated practicing the art of healing in any form, to pass a common examination in the basic sciences. Lastly, he pointed out the benefits which the doctor derives from being a member of his county and State medical societies, and made a plea for a more hearty, brotherly co-operation among physicians.

Dr. J. F. Crump gave the differential diagnosis between iritis, conjunctivitis and glaucoma.

Dr. J. C. Beard read a paper on "A Classification of the Nephritides," and gave three case reports representing different phases of the disease.

It was a general all round good meeting, which everyone seemed to enjoy. The society wishes to extend an invitation to the physicians in surrounding towns to come back and visit, as they hope to have many more such meetings.

Book Reviews

The Surgical Clinics of North America (Issued serially, one number every other month). Volume 7, Number 2 (Cancer Number, April, 1927.) 231 pages with 113 illustrations. Per clinic year (February, 1927 to December, 1927). Paper, \$12.00; Cloth, \$16.00 net. Published by W. B. Saunders Company, Philadelphia.

Our review of this unusual number will consist of a list of the contributions which speaks for itself of its value and interest.

Clinic of Dr. John B. Garrett, "An Atypical Cancer of the Forearm."

Clinic of Drs. Krumbhaar, Clayton and Mulholland, "Clinico-Pathologic Conference on Tumors."

Clinic of Dr. J. L. Goforth, "Giant-Cell Tumor of Bone."

Clinic of Drs. Charles C. Norris and M. E. Vogt, "Radiation in Gynecology."

Clinic of Dr. Fielding O. Lewis, "Treatment of Cancer of Paranasal Sinuses, Tonsils, and Larynx."

Clinic of Drs. J. L. Weatherwax and H. M. Sharp, "Physical Considerations in the Use of Radium and X-Rays."

Clinic of Dr. J. Ralston Wells, "Gastrotomy for Cancer of the Esophagus."

Clinic of Drs. J. D. Morgan and R. A. Bradley, "Irradiation Therapy with Fractional Doses of X-Ray."

Clinic of Dr. Henry K. Pancoast, "Treatment of Cancer by Irradiation Methods."

Clinic of Dr. John Berton Carnett, "The Diagnosis of Early Cancer of the Breast."

Clinic of Drs. P. O. Snoke and W. P. Belk, "Multiple Primary Tumors of the Skin."

Clinic of Dr. William P. Belk, "Branchiogenic Tumors of the Neck."

The Surgical Clinics of North America (Issued serially, one number every other month.) Volume 7, number 3 (Chicago Number—June, 1927.) 330 pages with 81 illustrations. Per clinic year (February, 1927 to December, 1927.) Paper, \$12.00; Cloth, \$16.00 net. Published by W. B. Saunders Company, Philadelphia.

Twenty-seven Clinics are described in this issue.

Dr. Arthur Dean Bevan presents, "Melanotic Tumor of the Brain" and "Two Cases of Head Injury;" and Dr. Golder L. McWhorter holds a clinic on "Operation on Two Cases of Secondary Carcinoma and on one case of Primary Cyst-Adenoma of the Parotid Gland. Relation of the Lobes of the Parotid to the Facial Nerve."

City Health Administration. By Carl E. McCombs, M. D., National Institute of Public Administration and New York Bureau of Municipal Research. Published by The MacMillan Company, New York, 1927. Price, \$5.50.

Part One in this book refers to Municipal Health Functions. Part Two: The Organization and Administration of Sickness Preventive Functions. Part Three: The Organization and Administration of Sickness Treatment Functions.

Diseases of the Stomach, Diagnosis and Treatment, with an introduction to Practical Gastro-Enterology. By Martin E. Rehfuess, M. D., Assistant Professor of Medicine at Jefferson Medical College. Octavo volume of 1236 pages with 519 illustrations, some in colors. Published by W. B. Saunders Company, Philadelphia, 1927. Cloth, \$12.00.

This practical book presents the every-day problems in diseases of the stomach and digestive tract. A certain part of the book is devoted to gastro-enterological laboratory, the method of x-ray examination and other data which the practical internist needs. A small chapter is included on medical treatment and a final group of diet lists and directions which have been useful to the author in this line of work.

The Springtime of Physick, being a Diverting Outline of Medicine and Surgery. By Laurance D. Redway, M. D., Attending Ophthalmologist; Northern Westchester Hospital, Mount Kisco, New York, Westchester County Hospital, N.Y., Sing Sing Prison, Ossining, N. Y. Ophthalmic Surgeon, New York Central Railroad. Published by Int. Journal of Surgery Co., 18 East 41st Street, New York. Price, \$2.00.

This book is a comprehensive survey of the principal personages and high lights in the development of medicine and surgery from earliest times through the Golden Age of Rome. It is replete with subtle humor and broad satire.

Text-Book of Bacteriology.—By William W. Ford, M. D., Professor of Bacteriology, School of Hygiene and Public Health; Lecturer on Hygiene, School of Medicine, Johns Hopkins University. Octavo of 1069 pages with 186 illustrations. Published by W. B. Saunders Company, Philadelphia, 1927. Cloth, \$8.50 net.

This book gives very accurate descriptions of the micro-organisms commonly encountered in medicine, comparative pathology, and hygiene and public health.

Practical Lectures on the Specialties of Medicine and Surgery. Delivered under the Auspices of The Medical Society of the County of Kings, Brooklyn, New York. Second series, 1924-1926, with one hundred and ten illustrations. Published by Paul B. Hoeber, Inc., New York. Price, \$7.00.

This book is exceptionally well named, because it is practical from beginning to end. Each lecturer is a master of his subject, and presents material having real value to the average Doctor of Medicine.

**The only way you can
visit Rochester, Minn.
en route to or from
the A. M. A. Convention
without extra cost.**

Travel
by Great Western
to the meeting of the

**American Medical
Association**

**Minneapolis, Minn.
JUNE 11 to 15, 1928**

Fast all-steel trains daily to Minneapolis—
from Chicago, Kansas City, St. Joseph, Des
Moines, Omaha.

Pullmans of the latest type, observation and
club cars, and dining cars.

Let us tell you also about very low fares
to the Convention and how you can com-
bine this with a wonder tour of the Na-
tional Parks and Pacific Coast.

Address R. A. Bishop, Gen'l Pass'r Agent
122 S. Michigan Blvd., Chicago

Chicago Great Western



Annual Meeting ARKANSAS MEDICAL SOCIETY

MAY 1-2-3, 1928
EL DORADO

See Program, Page 211 of
This Issue.



Kansas City Annual Fall Clinical Conference

October 9th-10th-11th, 1928
New Shrine Temple
Kansas City, Missouri

Offering again for the sixth year a program of clinics, lectures, demonstrations, motion pictures, and unusual scientific and technical exhibits.

The Kansas City Southwest Clinical Society offers the following features:

DAILY BULLETIN

listing medical and surgical clinics in hospitals and offices of Greater Kansas City may be seen at Hospitals, Union Station, or Clinical Society Office.

MONTHLY CLINICS

are held the second Tuesday of each month as scheduled in Monthly Bulletin. Further information available through Clinical Society Office.

MONTHLY BULLETIN

Quarterly issues of which contain scientific articles as well as program of Monthly Clinic available to physicians and surgeons of the Southwest upon application.

SCIENTIFIC EXTENSION SERVICE

Programs for Scientific and Public Health Meetings furnished County Medical Societies within a radius of 200 miles.

Kansas City Southwest Clinical Society

620 Rialto Building

Kansas City, Missouri

Telephone Victor 2538

THE JOURNAL

OF THE

Arkansas Medical Society

PUBLISHED MONTHLY UNDER THE DIRECTION OF THE COUNCIL

Vol. XXIV

LITTLE ROCK, ARK., MAY, 1928

No. 12

Original Articles

USE OF THE VAS PUNCTURE IN ACUTE AND CHRONIC GONORRHEA*

H. KING WADE, M. D., Hot Springs

There has been no remedy developed in the past ten years in the treatment of gonorrheal infections in the male that has proven itself to be of greater value than the vas puncture. By its aid in acute and chronic gonorrhea the morbidity of this disease is enormously reduced. In our own clinic we have had an opportunity to view the results of this procedure in every type of case that confronts the urologist. We admit that it has been somewhat overrated and, consequently, many disappointments have ensued. We feel that the judicious application is what we need most to make it a more satisfactory procedure in everyone's hands, and we shall attempt in this paper to outline briefly the best use of this operation as its successes and failures have presented themselves in our practice.

For a better understanding of this subject we wish to review briefly the anatomy and physiology of the seminal vesicles. The seminal vesicle is a serous sac which acts as a reservoir for the seminal fluid. It is lined with a pseudo stratified layer of epithelium which has a very low resistance to bacterial invasion. The seminal fluid is emptied into the vesicles by way of the vas deferens and ampulla. The ejaculatory ducts extend from the vesicles opening into the prostatic portion of the urethra.

In acute anterior urethritis it is variously estimated that the posterior urethra becomes involved in sixty to ninety per cent of the cases. In acute posterior urethral infections, in every case the organism has entrance to the

ejaculatory ducts and seminal vesicles. Of course the vesicles do not become infected in one hundred per cent of these cases, but the percentage is very high, probably in seventy to eighty per cent. Infection of the vesicle is responsible for such pathological processes as arthritis, epididymitis and endocarditis. It has a very low resistance to infection. The ejaculatory ducts become plugged with pus, the vesicles become swollen, resulting in a stagnation from which metastasis and epididymitis readily take place. The vesicles, when they are thus infected, are readily palpable and tender. When this condition is noted, medication of the vesicles is certainly indicated. Belfield reports the use of the vas puncture in eighty-three cases occurring in acutely inflamed posterior urethras in which there did not follow a single case of epididymitis or arthritis. Virtually all of these cases cleared up readily. Of course, the usual treatment to the prostate and urethra was employed. He states that it is much more practical to cleanse the vesicles in the acute stage when the contents are liquid than to wait until a great deal of damage has been wrought and the contents have become a semi-solid fibrinous exudate. We have operated on many cases in which there had developed an acute arthritis with single or multiple joint involvement and many times we have had amazing relief to the joints. Our experiences in the prevention of epididymitis and arthritis bear out Belfield's report. Of course, the vas puncture in acute gonorrhea does not mean that the condition of the prostate and urethra is to be ignored. We find that we can give more efficacious treatment to the prostate and urethra if the vesicles have been taken care of by the puncture as we are not in constant dread of that grievous condition, epididymitis. Thus it is well to use this agency in acute conditions whenever indicated.

*Read at the Tri-State Meeting, Shreveport, La., January, 1928.

In chronic gonorrheal infections of the prostate, vesicles and urethra we contend that they should be handled as an entity. We are frequently confronted with morbid conditions following chronic gonorrhea, such as recurrent epididymitis, arthritis, prostatitis, the annoying morning drop, or occasional recurrent urethral discharges all of which must be taken care of before the patient is clinically cured. We would gain little by cleaning up the prostate and leaving a lesion in the urethra or seminal vesicle. We would certainly gain nothing by clearing up the vesicles and leaving lesions elsewhere, as reinfection will take place and for this reason we must consider all of our pathology if our patient is to receive a cure. A patient coming under our observation presenting this entity of pathology is placed under very careful treatment for thirty to sixty days, consisting of prostatic massage, instillations, irrigations, urethral dilatations and endoscopies. The vaccine therapy is of doubtful value, but in our opinion either a stock or autogenous vaccine should be used so that the patient may receive every possible chance for recovery. The completion of this course of treatment, we consider the ideal time for the performance of the vasotomy. If there is a recurrent epididymitis, then the vasotomy is certainly indicated earlier in the treatment. Thereafter, proceed with the treatment of the prostate and urethra. Many times we are confronted with an acute epididymitis when these patients first report to us for treatment. We wish to stress the importance of more careful treatment in the cases of epididymitis. In an article we read before the Southwestern Urological Association in 1926 we classified the different stages of epididymitis into: First, vasitis; second, the vaso-epididymitis; third, a moderate degree of epididymitis, and fourth, an extreme epididymitis. This, of course, is according to clinical symptoms and pathological manifestations in the epididymis. We consider the third and fourth stages as strictly surgical conditions and in which free drainage of the epididymis should be obtained by epididymotomy. This we have found will enormously benefit the infected vesicle above, as well as the prostate and urethra. It will, in most cases, prevent occlusion of the cord on the infected side and allow medication of the infected vesicle on that side to be done successfully at a later date. We have also found, in all stages of epididymitis.

calcium chloride, intravenously, to be of great benefit. Diathermy is of value. In vaso-epididymitis we have often employed the vasopuncture with medication of the vesicle as an abortive measure. In chronic gonorrhea the vesicles oftentimes are found to be rather sclerotic, but we do not feel that this condition is a contraindication for the vasopuncture which should be instituted before attempting such radical procedure as a seminal vesiculectomy. In cases where there is a chronic arthritis we do not see the spectacular results that are so often noted in the acute conditions, but there is invariably satisfactory improvement in the joints.

Deductions: First: The vasotomy has a very large and useful field in acute posterior infections and will limit the number of complications subsequent to infections of the seminal vesicles.

Second: Beneficial results are obtained in acute arthritis following the vasopuncture.

Third: In chronic conditions it is an indispensable procedure in eradication of gonorrheal conditions of the vesicles, prostate and posterior urethra. It will eliminate recurrent epididymitis and improve joint conditions due to this infection.

Fourth: In our experience, covering a series of over seventeen hundred vasotomies, we are convinced, although it has not proven to be beneficial in every case, that it is the most satisfactory method of treatment in infections of the seminal vesicles.

Fifth: A carefully performed vasotomy will not produce sterility except in a very small percentage of cases, as proven by the second and third vasopuncture performed in our cases and by microscopic examination of the semen in approximately two hundred cases.

Abstracts

EPINEPHRINE: METHOD OF PROLONGING ITS EFFECT IN ASTHMA AND DEPRESSION OF SHOCK

In order to prolong the effect of epinephrine in asthma and the depression of shock, Howard Lilienthal, New York (Journal A. M. A., April 14, 1928), added massage of the site of the injection. For instance, in one case cited, in which he had operated for tuberculosis of the lungs by thoracoplasty and by drainage of a large pulmonary cavity, asthmatic at-

tacks were prominent and distressing. They had been relieved by injections of epinephrine but only for short periods. An injection into the subcutaneous tissues over the left deltoid was made, the dose being 5 minims (0.3 cc.) of epinephrine 1:1,000. For nearly forty-eight hours the patient was able to relieve asthmatic attacks by massaging the deltoid region and this entire experiment, of injection and massage, was repeated several times. In a second case, also tuberculosis with operation by thoracoplasty, an attack of asthma with loud musical rales in the better lung occurred. Here, also, the effect was most gratifying. Observations on the blood pressure were made, and the results obtained were similar to those reported by Luekhardt and Koppanyi. The initial reading of 120 mm. of mercury before injection rose to more than 130 on massage, about forty-five minutes later. In a third case, similar to the other two, a woman, in whom the asthmatic attacks were very severe and had preceded the recognition of the tuberculosis, obtained considerable relief by this treatment. In one other patient, a young man, also tuberculous, no relief followed the use of epinephrine, nor was there any hemodynamic effect even after the initial injection. Lillenthal has also applied this method in shock following an operation for perforated duodenal ulcer. There was great depression with ischuria and extremely low arterial tension, 75 systolic and 40 diastolic. The abdomen was soft and there had not been any evidence of abdominal infection. The arterial tension had risen to 82 systolic and 50 diastolic when the patient was first seen. Immediately after the injection of 5 minims (0.3 cc.) of epinephrine hydrochloride, the systolic pressure rose 10 points and the second cardiac sound, which had been almost or quite inaudible before, clearly returned. An hour later the depression had recurred but the tension rose 10 points on massage of the injected area.

ACUTE ASPHYXIA AS MEDICAL PROBLEM

Final control of all the great emergencies causing asphyxia and requiring resuscitation rests with the medical profession, says Cecil K. Drinker, Boston (Journal A. M. A., April 21, 1928). The three great emergencies particularly susceptible to proper treatment are drowning, electrical shock, and carbon mon-

oxide poisoning. The first of these is the most frequent and the second the least. Drowning, so far as is known, presents a relatively simple form of asphyxia. On complete immersion the victim uses up the small amount of oxygen imprisoned in the lungs and goes rapidly on to a degree of generalized oxygen lack, which results in progressive death of the various tissues throughout the body. In all cases of asphyxia, death should never be admitted until prone pressure artificial respiration has been used for at least an hour. Electrical shock, like drowning, produces a simple form of asphyxia, but, unlike drowning, is practically never suicidal, the shocked person being usually in the best of physical and mental health. The victim of electrical shock may be found in one of several conditions: 1. Respiration may have ceased, but the heart and circulation may be normal. 2. Respiration and circulation may have ceased at the same time, the ventricles of the heart being in fibrillation. 3. Respiration may be present and the heart stopped; i. e., as in ventricular fibrillation. Patients of this type, deprived abruptly of circulation, become deathly pale at once. On the other hand, patients in whom the respiration has stopped and the heart continues to beat—favorable conditions for artificial respiration—become cyanotic as oxygen is lost from the circulating blood. If, with artificial respiration, this cyanosis begins to disappear, the operator has encouraging evidence that the circulation is active. Carbon monoxide poisoning from all causes—manufactured gas, automobile exhaust, smoke from fires, the gases from coal heating furnaces—constitutes a slowly increasing hazard. The gassed patient presents a more complex problem than does the victim of drowning or electrical shock. Carbon monoxide combines with the hemoglobin of the blood, excluding oxygen from the hemoglobin molecule and causing death by oxygen deprivation. The entire process may be very slow. When death occurs, respiration fails before the heart beat ceases; but if at the time respiratory failure takes place the patient is removed from the gas-laden atmosphere and is given artificial respiration, normal breathing can often be restored. Owing to the emer-

geney nature and frequently the very unpleasant circumstances under which these conditions are met in practice, American physicians are not properly alert either to their true nature or to the best methods of treatment. The most recent formulation of rules for prone pressure artificial respiration are given and the proper use of that method constitutes the great life-saving measure in drowning and electric shock. In gas poisoning the treatment advocated is the inhalation of 95 per cent oxygen and 5 per cent carbon dioxide. Drugs are used by some physicians but with the exception of the occasional intravenous administration of caffeine sodiobenzoate and of very small doses of epinephrine, their use does not merit endorsement.

ETIOLOGY OF CHRONIC MYOCARDITIS

James P. O'Hare, Abner W. Calhoun, Boston, and Hugo O. Altnow, Minneapolis (*Journal A. M. A.*, May 5, 1928), discuss chronic myocarditis in a group of nonvalvular cases in which the blood pressure is normal or low. In this type of chronic myocarditis the etiology is uncertain. Osler, Assman and other German writers, and most of the authors of the current textbooks on the subject, believe that the acute infections, especially diphtheria and rheumatic fever, are common causes of the myocarditic heart. They also assert that overexertion and certain toxic substances such as alcohol, lead and phosphorus are occasionally responsible. Warthin and others believe that syphilis, per se or associated with aortic lesions, is an important factor. George E. Fahr believes that the hypertension is the background in 75 per cent of cases of chronic myocarditis. Walker and O'Hare proved in 1924 that retinal arteriosclerosis was almost invariably associated with hypertensive disease. In that paper, however, were included fourteen cases of retinal arteriosclerosis which at the time of examination showed normal blood pressure readings. A search into the past history of this group revealed the interesting

fact that these patients had all been previously hypertensive at one time. These cases suggested that the finding of retinal arteriosclerosis indicated a past hypertensive stage, and that the cause of the low blood pressures at the time of examination was, in all probability, the myocardial insufficiency which all of them showed. They have collected a series of fifty cases of chronic myocarditis, showing normal or low blood pressures, in which records of previous blood pressures were obtainable. These were studied with especial reference to the evidences of retinal arteriosclerosis. Valvular disease, syphilis and hyperthyroidism did not play any part in these cases. The results of these studies are indicated. This includes fifty cases in which the primary diagnosis was chronic myocarditis, as indicated not merely by the character of the heart sounds but also by the presence of rales at the bases, engorgement of the liver and edema of the extremities. At the time of examination, all these patients had a normal or low blood pressure. With the exception of one, every patient showed definite sclerosis of the retinal arteries. Blood pressure readings indicate clearly that every patient in this group has had a previous hypertension varying in degree from the high figures (systolic 235) at the top to the more moderate ones (systolic 160) at the bottom. To contrast with these cases, the authors have collected a group of thirty-eight patients with chronic valvular heart disease, all of whom revealed the signs and symptoms of myocardial insufficiency. Retinal examination disclosed absolutely no evidence of arteriosclerotic changes except in eight patients. These eight, too, offer additional strong proof of the theory advanced by the authors, because seven of them gave a definite or suggestive evidence of a previous hypertension, with histories of a blood pressure over 150 mm. In the eighth case, previous blood pressure records were not obtainable. The authors believe that the finding of retinal arteriosclerosis usually indicates a previous hypertension, and that the finding of this in cases of chronic myocarditis not associated with hyperthyroidism or valvular disease suggests a vascular hypertensive origin for this disease. Additional evidence in favor of this theory is produced by the roentgen-ray studies of these hearts.

THE JOURNAL

OF THE

ARKANSAS MEDICAL SOCIETY

Owned by the Arkansas Medical Society and Published
under the direction of the Council.

WILLIAM R. BATHURST, Editor
810-812 Boyle Building, Little Rock, Arkansas.

Published Monthly. Subscription \$3.00 per year; single
copies 25 cents.

Entered as sccond-class matter, June 21, 1906, at the
postoffice at Little Rock, Arkansas, under the Act of
Congress of March 3, 1879.

Acceptance for mailing at special rate of postage pro-
vided for in Section 1103, Act of October 3, 1917, autho-
rized August 1, 1918.

The advertising policy of this Journal is governed by
the rules of the Council on Pharmacy and Chemistry of
the American Medical Association.

All communications of this Journal must be made to it
exclusively. Communications and items of general inter-
est to the profession are invited from all over the State.
Notice of deaths, removals from the state, changes of
location, etc., are requested.

OFFICERS OF THE ARKANSAS MEDICAL SOCIETY

R. H. T. MANN, President.....	Texarkana
THAD COTHERN President-Elect.....	Jonesboro
H. H. NIEHUSS, First Vice-President.....	El Dorado
O. M. BOURLAND, Second Vice-President.....	Van Buren
SAM J. ALLBRIGHT, Third Vice-President.....	Searcy
R. J. CALCOTE, Treasurer.....	Little Rock
Wm. R. BATHURST, Secretary.....	Little Rock

COUNCILORS

First District—W. W. VERSER.....	Harrisburg
Second District—L. T. EVANS.....	Batesville
Third District—M. C. JOHN.....	Stuttgart
Fourth District—W. T. LOWE.....	Pine Bluff
Fifth District—L. L. PURIFOY.....	El Dorado
Sixth District—C. A. ARCHER.....	De Queen
Seventh District—DEWELL GANN, SR.....	Benton
Eighth District—ANDERSON WATKINS.....	Little Rock
Ninth District—SAM G. DANIEL.....	Marshall
Tenth District—S. J. WOLFERMANN.....	Fort Smith

Editorials

THE EL DORADO MEETING

On May 1st, the Arkansas Medical Society
opened its 53rd Annual Meeting at El Dorado,
with Dr. Homer Scott, first vice-president, in
the chair, President Thibault being absent
on account of illness. The meeting was one
of the most successful in the history of the
Society, over 200 members registering the
first day.

The following officers were elected for the
ensuing year:

- President, R. H. T. Mann, Texarkana.
- President-elect, Thad Cothern, Jonesboro.
- First Vice-President, H. H. Niehuss, El
Dorado.
- Second Vice-President, O. M. Bourland,
Van Buren.
- Third Vice-President, Sam J. Allbright,
Searcy.
- Treasurer, R. J. Calcote, Little Rock (re-
elected).
- Secretary, Wm. R. Bathurst, Little Rock
(re-elected).

Delegate to the A. M. A., Homer Scott, Lit-
tle Rock.

Hot Springs was chosen for the next meet-
ing place.

Among the notable features of the conven-
tion was the address of Dr. Sam E. Thompson
of Kerrville, Texas.

Other visitors who read papers were:
Dr. Neuton S. Stern, Memphis, Tennessee.
Dr. Henry Boswell, Sanatorium, Mississippi.
Dr. H. W. E. Walther, New Orleans, Louis-
iana.

The proceedings will appear in the July is-
sue and the scientific papers will be published
throughout the year.

The Woman's Auxiliary of the Arkansas
Medical Society elected the following officers:
President, Mrs. C. G. Hinkle, Batesville; Vice-
President, Mrs. C. E. Oates, Little Rock; Pub-
licity Secretary, Mrs. Wm. R. Bathurst, Little
Rock; Treasurer, Mrs. B. A. Rhinehart, Little
Rock; Parliamentarian, Mrs. Dewell Gann,
Sr., Benton; Historian, Mrs. C. W. Garrison,
Little Rock; Mrs. J. B. Wharton, El Dorado
and Mrs. S. A. Drennan, Stuttgart, were
elected to complete the board on which Mrs.
R. H. T. Mann of Texarkana and Mrs. Gray-
son Tarkington of Hot Springs are members.
Mrs. John R. Lynn was appointed Secretary
to Mrs. Porter, the new President.

To the Medical Profession:

The Committee on Medical Legislation, appointed by the incoming President, Dr. R. H. T. Mann of Texarkana, desires to announce a program of activity to secure the passage by the next Legislature of the Basic Medical Law, a copy of which has already been published in the Journal of the Arkansas Medical Society. This law makes its appeal to the public by its absolute fairness; there can be no charge that it favors one school of medicine above the other. It protects the public from the ignoramus. If, after becoming an educated physician, the individual elects to become a charlatan, of course, he may; but the chances are that being clothed with the knowledge, the honor and the sacredness of our profession, he will continue a useful, honest and upright man.

The Medical School has a program which includes a Charity Hospital and adequate buildings. Let us all be for that heart and soul. The State Medical Society at El Dorado endorsed it. There can be nothing but approval from the profession of the State. There is not a discordant note anywhere. The County Judges of our State have endorsed it without a dissenting vote. They appointed a committee of three, of which Judge Etheridge of Hamburg, Ark., is chairman, to co-operate with us. The American Legion and the Woman's Auxiliary have promised to help us. What conditions more favorable can we ask?

The Legislative Committee ask that you combine with the above named organizations in every county in the State. Report to your councilors and to members of the Legislative Committee at once. Meetings of the medical profession, County Judges, the American Legion and Women's Clubs should be arranged for at once. Speakers will be provided and literature sent for distribution.

The time is short and prompt action on your part necessary. Let us give Dr. Mann our earnest, hearty support in his effort to make his administration a memorable one in the history of medicine in Arkansas, and in his effort to place our State where she belongs, first in loyalty to the highest ideals in our profession.

Let us then work in common for its passage. Copies of the law will be mailed to you, or to any one you may designate, upon request.

For further information address Chairman Dr. F. Vinsonhaler, Little Rock; Dr. St. Cloud Cooper, Fort Smith; Dr. M. L. Norwood, Lockesburg, Dr. E. E. Barlow, Dermott; Dr. W. M. Majors, Paragould.

Frank Vinsonhaler, *Chairman,*
Committee on Medical Legislation.

Extract from Gov. McRae's last Message to the General Assembly.

THE MEDICAL SCHOOL

The practice of medicine is an important profession, and those who undertake to relieve human ailments by the application of medical science should be fundamentally trained. Medical progress has placed new responsibilities upon the State; and medical education, until quite recently administered almost exclusively by proprietary schools and endowed institutions, has now, and justly so, become a fixed and very definite part of the program of university education. To attain happiness is the first and greatest impulse of the human heart, and the greatest factor in the promotion of human welfare and the common good is health—individual, State and National.

The relief of bodily deformities, the cure and prevention of disease, and the education of the public in standards of right and healthful living, belong naturally to the medical profession. The State should not only insist that those who offer and profess to treat the sick should be well trained, but adequate and acceptable facilities for medical instruction should be provided for those young men and women who desire to undertake the study of medicine.

The Medical School was established at Little Rock as a department of the State University, in 1911. It is under the control of the trustees, and appropriations have been made for its maintenance since 1913. Struggling along for fourteen years upon shamefully inadequate appropriations, surviving the critical and trying period of the adoption and enforcement of advanced entrance requirements, during which period the enrollment dropped to less than twenty students, with no college building of its own, hampered on all sides by unjustified opposition, the school has emerged with a complete vindication, and has won a merited place in the educational program of the State. It now offers

a full four-year course of instruction in all of the departments. The first two years are given at the War Memorial Building, and the clinical years at the several hospitals in Little Rock and at the Isaae Folsom Clinic.

STATE GENERAL HOSPITAL

One of the most important measures ever adopted by the General Assembly was in 1917, providing for a State General Hospital and for the free treatment of the sick, poor, injured and crippled persons of the State. In my opinion, the time has come when the State of Arkansas can no longer withhold its aid from the thousands of poor, worthy sick persons who could be cured, or benefited and restored to their economic efficiency by hospital care and treatment.

The erection of a State General Hospital to be operated in connection with the medical school, and under the supervision of the University trustees, would place Arkansas in the rank of those States which have already taken this forward step. There are, in every county of the State, some poor persons unable to pay professional fees, and who are a burden to their communities. Some of them are in the county hospitals, with the poorest facilities. But few of the counties can provide proper hospital treatment for their helpless sick, and the only door of hope for such unfortunates is a State Hospital. Such hospital would relieve the counties, care for the poor and sick, and would also solve the clinical requirements of the medical school, for students would receive their training in the hospital under the direction of the teachers of the medical school. It would also afford opportunities, not now obtainable in the State, for physicians to take post-graduate courses of study, and young women desiring to enter the practice of medicine would be trained in the medical school and in the wards of the hospital.

In order to meet the requirements of higher medical education, and to make of the medical school an institution worthy of the name, and one to attract the highest class of students:

I recommend that sufficient appropriations should be made for the erection of suitable medical school buildings and a State General Hospital and home for nurses in training.

I recommend that the State, with the consent of the various counties, agree to take over all the county hospitals and poor-farms, and assume the care of the patients that may be in them and such as may hereafter become

eligible for admission, each county being allowed to have its patients enter the State Hospital, and required to pay the just proportion of expense, as in the case of the State Tuberculosis Sanatorium, and that the property of the county hospitals be sold and the funds be used on buildings and equipment for the State Hospital.

Editorial Clippings

SUCCESSORS TO DIPLOMA MILLS

Two medical schools, the Kansas City College of Medicine and Surgery and the St. Louis College of Physicians and Surgeons, were involved in the Missouri diploma mill scandal of 1923-1925. As a consequence their charters were revoked, June 23, 1926, and May 23, 1927, respectively. A successor to the former was chartered, July 29, 1926, under the name of the American Medical University. It occupies the same site and is apparently being operated by the same interests as its predecessor. Presumably in anticipation of similar action the St. Louis College of Physicians and Surgeons obtained, April 8, 1926, a charter for a new institution bearing the name of the Missouri College of Medicine and Science. This charter was obtained thirteen months before that of the St. Louis College of Physicians and Surgeons was actually revoked. The announcement published by the St. Louis College of Physicians and Surgeons for the college year 1926-1927 bore not only the name of the St. Louis College of Physicians and Surgeons, but also of the Missouri College of Medicine and Science. The appearance of these two names on the same announcement makes it fairly evident that the institution convicted of being a diploma mill and the newly chartered institution were conducted by the same persons. The relations of both the new institutions with their diploma mill predecessors justify the belief that they are "birds of a feather." Four "graduates" of the American Medical University and ten holding diplomas from the Missouri College of Medicine and Science were admitted to examinations in Colorado and eight were granted licenses. This action, however, was the last life throb of the old Colorado medical practice law, which has now been replaced by one granting the board authority to refuse recognition to the output of such institutions. Congratulations are due to

the people of Colorado. Again we commiserate with Missouri!—*Jour. A. M. A.*, April 14, 1928.

Personal and News Items

Dr. Sam G. Daniel of Marshall was a recent visitor to Little Rock.

Dr. C. S. Pettus and Dr. S. F. Hoge of Little Rock addressed the North Mississippi Six County Medical Society at Oxford, Mississippi, April 25th. Dr. Pettus' paper was "Spinal Anesthesia" and Dr. Hoge's on "Blood Chemistry."

Dr. James I. Scarbrough, Little Rock, was appointed head of the Department of Surgery at the University of Arkansas School of Medicine, at a meeting of the Board of Trustees held recently at the State Capitol.

Dr. W. F. Smith of Little Rock read a paper April 12, 1928, before the Pope County Medical Society at Russellville on "Malignant Neoplasms of Bone," with lantern slide demonstration.

INTERNATIONAL HEALTH*

In the middle of the last century, the first international sanitary conference was held in Paris, to deal chiefly with quarantine measures against cholera and yellow fever. It was the initial effort at co-operation of national systems of public hygiene. Fifty-six years passed before the permanent Office International d'Hygiène Publique was set up in Paris. In 1922 came the Permanent Health Organization of the League of Nations, which effected a working arrangement with the Office International and the Pan-American Sanitary Bureau and launched a world-wide undertaking for the prevention and control of disease. It is this work with which Dr. Cabot deals in what Professor Winslow describes as an "excellent summary—highly commended to all who are interested."

"It may seem of little moment at an American fireside that a case of bubonic plague has been found on a tramp steamer en route from Bombay to Singapore," says Professor Winslow in a foreword, but "the threads of fate are long and tangled ones."

Dr. Cabot himself remarks that "one man's poison may be another man's meat, but all men's parasites are remarkably cosmopolitan, and spread their blight without respect of creed, color or previous condition of servitude."

He finds it natural that an international organization of which we think "as a more or less successful attempt to prevent war" should deal with the passage across boundaries and strategic mountain ranges of dangerous bacterial hosts. "Positive international co-operation," says the author, who is Professor of Clinical Medicine at Harvard, "in every matter of mutual interest is one of the ways to prevent war by increasing international understanding, international usefulness and international education."

Dr. Cabot summarizes the health work of the League by recounting the preliminary emergency work of the Epidemic Commission in Eastern Europe after the war and by briefly relating the subsequent work of epidemic control, the interchange of public health officers, the anti-malaria campaigns, the standardization of drugs, sera, etc. He deals also with the control of the production and traffic in opium, which although not under the Health Organization is a matter of vital interest to medical men the world over.

Perhaps the most widely known, and obviously a most effective, piece of League work is the Epidemic Intelligence Service. "Until 1925 a large part of the world was ignorant of the health dangers that might at any time be threatening it from some of the most dangerous portions of the earth's surface," writes Dr. Cabot, in outlining this service which gathers and distributes by mail, telegraph and wireless vitally essential epidemic information.

Dr. Cabot ranks next in importance the Interchange of Health Officers, largely financed by the Rockefeller Foundations (whose funds, incidentally, have made possible the Intelligence Service), of which he says: "Such tours and conferences are practical, not formal, because progress in public health work is so rapid that interchanges between all parts of the world are necessary if all countries are to reap benefit of what each is learning."

In conclusion, Dr. Cabot expresses the opinion that the health work of the League "will continue to be one of the subjects on which the nations of the world can most effectively work together. Once accustomed to help each

other in this matter it will be easier to agree and harder to quarrel about other problems which have hitherto led to war."

*The United States and the League. No. 1. International Health. By Richard C. Cabot, M. D. Foreword by Prof. C. E. A. Winslow, New York: Educational Committee, League of Nations Non-Partisan Association.

Communications

Pine Bluff, Ark., May 10, 1928.

Dear Editor, having had to answer a number of telegrams and letters from inquiring friends in southeastern Arkansas on account of the newspapers here and also in Little Rock giving an account of my being attacked by my Jersey bull; and realizing the tendency of such reports to become more and more sensational unless they have the information from its source, it has occurred to me that perhaps I had better write you and give you the facts in case you might mention it in the Journal.

Had it not been for the timely interference of my wife and our cook, who succeeded in frightening the bull away, there would, have been a funeral for the next day. But as it was, I am not much "worse for the wear." With the exception of a dozen or more pine knots, and splinters in the back of my head, shoulders and back, which I had gathered into my flesh as the bull shoved me along on the ground, and a broken nose, black eye and my lower teeth knocked out; I am able to resume my practice as usual.

I have now had some teeth pulled by a dentist, and a Jersey bull to knock them out. In neither case, have I been able to put them back like they were before they came out, but I can testify that a Jersey bull can do the job a D— sight quicker.

Fraternally,
J. W. Scales.

Obituary

WALTON, JAMES W.—Dr. James W. Walton of Benton, aged 65, native of Saline County and active in the medical profession for the past 40 years, died April 18, 1928, after a long illness.

He is survived by his wife, seven sons, and three daughters.

We regret to announce the death of Dr. George S. Brown of Conway, May 11. Further notice will appear in the June issue.

IN MEMORY OF WILLIAM ELLIOTT PARKER, A. M., M. D.

Born February 11, 1867, Died April 26, 1928

Reared in New Orleans, he was educated in finished manner at LaFayette University, Pennsylvania, where he received the Master of Arts Degree. He was graduated with honors in the School of Medicine and Surgery at Tulane University and entered the field of the practice of medicine and surgery in New Orleans at once.

Dr. Parker was for eleven years the assistant executive of the late beloved Albert B. Miles, Chief of Staff in Charity Hospital, famed as the South's greatest eleemosynary institution.

For three years after the death of his lamented predecessor Dr. Parker carried on the work.

Dr. Parker's achievements as a surgeon and yellow fever expert in Charity Hospital are matters of distinguished record.

When the demands of the Spanish War began to unite the North and the South in our nation's defense, Mr. McKinley asked for the South's best talent in surgery and the handling of tropical diseases. Dr. Parker was asked to accept a commission as acting assistant surgeon in the U. S. forces. He accepted and served thruout with distinction in the Cuban campaign. His work during this period was specially noted in Col. Legarde's classic book on the surgery and the treatment of tropical diseases.

Among the excellent results of his surgery in this campaign he has been specially noted for his coolness and brave judgment and skill for his remarkable field operation on the hip and spine of the noted war correspondent, Edward Marshall.

Dr. Parker left the service with honorable discharge himself in wretched physical condition having at the end sustained an attack of yellow fever.

On account of his ill health he sought Hot Springs, Arkansas, where he so regained his former condition as to decide to locate at that place and pursue his professional work, opening an office in 1901.

He was widely known in circles from the highest to those without pretensions to social rank. He was honored and beloved by all.

He leaves two brothers, one sister and his mother to mourn with us our common loss. He has often told the writer: "I will never marry, there is only one for me—my mother."

Of my dear friend Parker, let me affectionately add:

"He never flunked an' he never lied. I guess he never knowed how."

J. Cabell Minor.

Hot Springs National Park, April 29, 1928.

—Hot Springs Sentinel Record, April 30, 1928.

RESOLUTIONS

In memory of Dr. T. M. Morgan of El Dorado, whose untimely death on March 6th this year, came as a great shock to all of us, as well as his splendid family, of which he has been a member since his birth, January 12, 1886, having been born in Union County, Arkansas, on that date.

Dr. Morgan spent his entire life in Union County; was educated in the common schools of the State and took his medical course in the State Medical School in Little Rock, where he received his diploma in 1910. Later on he took a post-graduate degree in the Louisville Medical School, and has been active in the practice of his profession in his home county. For a number of years he lived in and around El Dorado and Wesson.

After moving to El Dorado he was active as a City Health Officer, and was filling his office with the proper degree of intelligence and efficiency at the time of his death.

Dr. Morgan was a genial fellow and was at all times very friendly, cordial and accommodating. He was a member of the Methodist Church and the Masonic Lodge of Lisbon, Arkansas, where he received his degrees. He also worked with the El Dorado Chapter No. 13, after having moved to El Dorado. This good man will be greatly missed in the profession and in the Union County Medical Society, as well as his surviving parents, brothers and sisters, his wife and children.

THEREFORE: *Be It Resolved*, That we together extend to his good wife, father and mother, brothers and sisters, and his children, our heartfelt sympathy in their hours of great grief in the loss of this good man.

FURTHER, *Be It Resolved*, That a copy of this resolution of respect be mailed to his good

family and spread upon the minutes of the medical society.

Respectfully yours,

J. B. Wharton,
J. K. Sheppard,
F. P. Vines,

Committee.

RESOLUTIONS OF RESPECT ON THE DEATH OF DR. A. DAVISON

Whereas, Almighty God in His Divine Providence, has seen fit to call from our midst our fellow physician, Dr. A. Davison; and

Whereas, Dr. Davison, during the many years that he has followed his profession in this community, was highly respected by fellow members of the profession.

Now Therefore, Be It Resolved, by the Ouachita County Medical Society, that we, as a Society, wish to extend our sincere sympathy to the family.

Respectfully submitted,

The Ouachita County Medical Society,
R. B. Robins, Sec.

County Societies

SEBASTIAN COUNTY

(Reported by C. S. BUNGART, Sec.)

The regular meeting of the Sebastian County Medical Society was held on the evening of March 13, 1928, Dr. D. W. Goldstein, President, in the chair.

Dr. I. F. Jones, conducted the program, which consisted of discussion of medical legislation, especially the basic science law. The discussion was led by Drs. St. Cloud Cooper, W. G. Eberle and N. D. McCormack. It was the opinion of the Sebastian County Medical Society that this law is the best solution of the problem, and the delegates to the next meeting of the Arkansas Medical Society were instructed to support this movement.

The following delegates to the State Society were elected: St. Cloud Cooper and C. S. Holt; Alternates, A. F. Hoge and H. Moulton.

A committee was appointed to meet with the ladies and form an auxiliary to Sebastian County Medical Society.

Ethical question for discussion was "Ethics of Consultation."

Present: C. E. Benefield, J. H. Benefield, Billingsley, Blair, Buckley, Bungart, St. Cloud Cooper, Dorsey, Eberle, Foster, Goldstein, Harvey, Hoge, Holt, Hynes, Jeffery, Jones, Kennedy, Little, McCormack, McDaniels, H. Moulton, E. C. Moulton, Redman, Rose, Smith, Southard, Stubbs, Taylor, Thompson and Ware.

MONTGOMERY COUNTY

(Reported by J. H. McLEAN, Sec.)

The Montgomery County Medical Society met in regular session April 1, 1928.

Present: Freeman, McFadden, Robbins, Simpson, Stuart and McLean.

Election of officers for 1928, resulted:

President, W. D. Freeman (re-elected); Secretary-Treasurer, J. H. McLean (re-elected); Delegate to the State Meeting, J. D. Robbins; Alternate, J. H. McLean.

CRAIGHEAD COUNTY

(Reported by P. W. LUTTERLOH, Sec.)

The Craighead County Medical Society met April 5, 1928, in the Noble Hotel, Jonesboro, where a dinner was served. In the absence of the president, Dr. Stroud, Dr. Elders took the chair.

Delegates elected to the State Society meeting:

Thad Cothorn and H. H. McAdams; alternates, P. W. Lutterloh and J. T. Altman.

Dr. Cothorn suggested that the date of the Session of the North East Sectional Meeting, to be held in Jonesboro, May 3 be changed so as not to conflict with the Arkansas State Medical Society meeting, May 1, 2 and 3. It was then decided to postpone the meeting until May 16th.

A motion was carried that a letter of sympathy be sent to Mrs. A. W. Jernigan, wife of the late Dr. A. W. Jernigan, brother of Dr. R. M. Jernigan, a fellow member.

The question of dues was discussed, and the secretary issued a warning, stating that members failing to remit by April 10, would have their names dropped from the roster.

Dr. H. G. Green, D. D. S., of Paragould, was essayist for the evening. Subject: "The Relationship of Dentistry to Medicine in the Care of the Prospective Mother." The paper

was discussed by Drs. Willett, McCurry, Lile and Howard. Dr. Green was made an honorary member of the Society.

Dr. Willett introduced his guest, Dr. Cohn, who is connected, as eye, ear, nose, and throat specialist, with the Willett, Horner, and McCracken Clinic.

The next meeting of special interest to the Society will be a fish fry, to be given by Dr. Thad Cothorn. The date to be announced later.

OUACHITA COUNTY

(Reported by R. B. ROBINS, Sec.)

The Ouachita County Medical Society met in regular session Thursday night, April 5, 1928, at the home of Dr. J. S. Rinehart, in Camden. The program consisted of a round table discussion of various topics of interest to the medical profession.

The subject of a need for a modern laboratory, with a technician, at the local hospital, elicited considerable discussion. It was desired to encourage any philanthropic individual who might endow a laboratory.

HYGEIA, the lay magazine, published by the American Medical Association, was praised as a splendid publication that should be in every public school and in every home. The sense of the meeting was that its distribution would prove to be one of the greatest means of curbing quackery. The physicians present pledged themselves to promote its circulation.

After the business session, delightful refreshments were served by Dr. and Mrs. Rinehart.

There will be no meeting in May on account of the annual session of the State Society at El Dorado, May 1, 2, and 3.

BENTON COUNTY

(Reported by C. S. WILSON, Sec.)

The Benton County Medical Society met in Gravette, April 17, 1928, with the President, Dr. J. L. Clemmer, in the chair.

Dr. C. E. Hurley of Bentonville, presented a case, diagnosed "Ainhum." The patient, a young man, apparently in excellent health, truck driver by occupation. Dr. Hurley gave a summary of literature available to him, and suggested trauma as the probable etiologic factor.

Dr. Grantham of Joplin, Missouri addressed the Society on "Surgical Diseases of the Spine."

Case reports by Dr. Powell of Gravette elicited considerable discussion.

A vote of thanks was extended Dr. Grantham for his efforts in behalf of the Society.

Present: Atkinson, Buffington, Clemmer, Cox, Duckworth, Duncan, Eubanks, Hurley, Horton, Hughes, Ireland, Love, McNeil, Moore, Powell, Smiley, Thompson and Wilson.

Visitors: S. A. Grantham, Joplin, Mo.; R. M. Church, Stilwell, Okla.; R. L. Sellers, Westville, Okla.; I. W. Rogers, Watts, Okla.; J. A. Robinson, Cincinnati, Ark.; T. C. Ramsey, Gentry, Ark.; G. V. Poynor, South West City, Mo.; E. E. Poynor, Stilwell, Okla.

Book Reviews

Mechanics and Chemistry of the Human Body—(A Sequel to "Colonic Therapy"). By O. Boto Schellberg, New York City. 50 pages and 8 illustrations. Published by The Schellberg Institute, Inc., 24 East Forty-eighth Street, New York City. Price, \$1.00.

In this volume the author has amplified and extended the principles of colonic therapy, and gives especial attention to the physiological aspect of colon treatment, and therein we find certain definite findings on colon physiology.

Bronchoscopy and Esophagoscopy.—By Chevalier Jackson, M. D., Professor of Bronchoscopy and Esophagoscopy, Jefferson Medical College; Professor of Bronchoscopy and Esophagoscopy, Graduate School of Medicine, University of Pennsylvania. Second Edition, Reset. Octavo of 457 pages with 179 illustrations and 10 color plates. Published by W. B. Saunders Company, Philadelphia, 1927. Cloth, \$8.00 net.

The well known author of this book presents to the medical profession the fundamentals of the working knowledge of bronchoscopy and esophagoscopy. The wide-spread interest and remarkable development of this subject are due to the demands of the general progress of medical science. "Look and see" is the order of today.

WANTED—We have several well-trained practical laboratory technicians with additional training in physiotherapy graduating from our school of public health May 15; physicians, hospitals, clinics and health departments desiring such service can secure it by writing immediately. Address, Dr. L. H. South, Director Bureau Bacteriology—

KENTUCKY STATE BOARD OF HEALTH

532 West Main Street, Louisville, Ky.

WANTED—Salaried appointments for Class A physicians in all branches of the medical profession. Let us put you in touch with the best man for your opening. Our nation-wide connections enable us to give superior service. Aznoe's National Physicians' Exchange, 30 North Michigan, Chicago. Established 1896. Member the Chicago Association of Commerce.—(Adv).

FOR SALE—X-Ray machine 5 in, 30 ma. Bucky diaphragm, screens, cassettes, illuminator, fluoroscopic screen, complete developing equipment, good as new, a real bargain. Address: X, care this Journal.

The publishers of this Journal believe the readers have a right to trust the advertisements as much as editorials and news.

Therefore, we are careful to investigate the firms and their copy before we make contracts with them.

We will not accept advertisements of medicinal products that are not approved by the Council of Pharmacy and Chemistry of the American Medical Association. Nor will we knowingly print advertisements of any nature that are not believed to be entirely reliable.

We want every reader to say:—"I saw it advertised in my own State Medical Journal and I can safely purchase and prescribe it."

THE BULLETIN

OF

Trinity Hospital

PUBLISHED UNDER THE DIRECTION OF THE STAFF

Vol. II

LITTLE ROCK, ARK., JUNE, 1927

No. 1

Deep X-Ray Therapy*

Of the possibilities of x-ray therapy there seems to be no end. The high voltage apparatus holds out hope in the treatment of malignancies, tuberculosis of bone, leukemia, hyperthyroidism, tubercular peritonitis, fibroids of the uterus, metrorrhagias and menorrhagias, and many other conditions. It follows naturally then that if these powerful machines can be productive of so much benefit if properly directed, they can also be just as productive of ill effects if misdirected. Therefore, too much care cannot be exercised in the protection of the patient against inaccuracies in treatment.

It is a known fact that the output of these powerful machines varies considerably from day to day depending upon the variations in the primary current supply. Thus, a machine with a certain setting, delivering a certain amount of x-ray today will deliver with the same setting an entirely different amount tomorrow. The only safe method therefore of measuring the amount of x-ray received by a patient is to place the measuring device known as the iontoquantimeter upon the patient. This instrument is calibrated daily to insure its accuracy.

One of the most frequent errors in the use of these powerful machines is the inadvertent omission of one or more of the various metallic filters, which omission carries with it very serious consequences for the patient if not detected. The routine use of an iontoquantimeter makes this error practically impossible as it immediately shows that the patient is receiving unfiltered x-ray.

It is easily possible to cause a fatal result within a very few days by an overdose of x-ray and conversely it is just as easy to fail to obtain a possible good result by too small a

dose. In no other branch of medicine is accuracy more essential.

No patient should be given a deep x-ray treatment without a previous blood examination, which often prevents disaster, and no patient should be allowed to return home immediately after a heavy treatment, but should remain in bed under observation and possibly treatment for a varying period. A hospital, therefore, is a necessary adjunct to successful deep x-ray therapy.

In an effort to apply a lethal dose of x-ray to a malignant tumor, attention must not be centered solely upon the pathological condition, but the entire body of the patient must be taken into consideration. In considering the treatment of a malignant tumor it should not be overlooked that a patient is attached thereto.

For this reason x-ray treatment should not be administered in a haphazard way, but a definite plan of attack should be outlined, depending on the type of disease present and the vitality of the patient. For this reason a low red blood count is a contraindication for x-ray therapy and the absence of lymphocytes and mononuclears forecasts a fatal termination.

Deep x-ray therapy offers something in those cases which, until its advent, were considered hopeless, and life has been prolonged and rendered comfortable in many cases where formerly narcotics offered the only possibilities in treatment and many an inoperable case is thus made operable. Offensive discharges are eliminated or diminished much to the comfort of patient and relatives.

One of the most recent uses of deep x-ray therapy is in cases of amenorrhoea due to faulty development. Infantile uteri have been successfully treated inducing normal function.

TRINITY HOSPITAL STAFF

J. I. Scarborough, M. D.; M. D. Ogden, M. D.; A. M. Zell, M. D.; O. K. Judd, M. D.; R. B. Moore, M. D., and S. T. W. Cull, M. D.

*This is the seventh of a series of articles. The eighth will appear in an early number.



ILETIN (INSULIN, LILLY)

*The First Preparation of Insulin Commercially
Available in the United States; Five Years
on the Market; Pure—Stable—Uniform*



TETANUS ANTITOXIN, LILLY

*A Thoroughly Dependable, Highly Refined Anti-
toxin, Accurately Standardized, Small in Bulk,
An Improved and Convenient Syringe*



EPHEDRINE SULPHATE, LILLY

*For Topical, Oral, Subcutaneous and Intramuscu-
lar Use in Hay Fever, Asthma and Other Allergic
Affections; Physiological Dose Small; Action More
Sustained than Epinephrine
Supplied in Pulvules, Ampoules, Solution and
the Powdered Alkaloid*



Physicians' Inquiries Invited

ELI LILLY AND COMPANY

Research and Producing Chemists

INDIANAPOLIS, U. S. A.

Established 1876

THE BULLETIN

OF

Trinity Hospital

PUBLISHED UNDER THE DIRECTION OF THE STAFF

Vol. II

LITTLE ROCK, ARK., JULY, 1927

No. 2

Certain Laboratory Procedures* Their Value and Indications

At the present time, when laboratory procedures are undergoing such rapid series of modifications and amplifications, it is felt that a brief resume of certain tests of definite and recognized value, along with their indications, might prove to be of some assistance to those not particularly engaged in this specialty. Accordingly there is offered below a tabulation of tests used in certain conditions, designed to help in the attack upon the clinical questions involved. These are:

RENAL FUNCTION:

Mosenthal and phenolsulphonphthalein tests.

These two tests are of the greatest general application. Blood urea and nonprotein nitrogen figures only rise with more advanced stages of renal impairment. Creatinine figures above five are of great prognostic value in all conditions, except urinary obstruction cases, e. g., prostatic hypertrophy.

HEPATIC FUNCTION:

The two tests of greatest help in this connection are: The Icterus Index and the qualitative estimation of urobilin in the urine. The Icterus Index gives us quantitatively the amount of bilirubin in the blood serum and tells us whether a true or latent jaundice is present, and by repetition whether a jaundice is increasing or decreasing.

The Vandenberg qualitative test tells us with a fair degree of accuracy whether a given case of jaundice is obstructive or hemolytic in origin.

In cases of rather advanced diffuse liver damage, the Rosenthal dye test often proves to be of considerable help.

There are numerous other tests which as yet have to prove their clinical value.

THYROID FUNCTION:

The only test of definite proven value in this connection is a determination of the basal metabolic rate.

GASTRIC FUNCTION:

Aside from X-ray procedures, the most valuable single determination to be made in this connection is an examination for the presence or absence of free hydrochloric acid in the gastric contents following a test meal. An anacidity is of importance in certain cases of obscure diarrhoea, in suspected pernicious anemia and, with reservations, in carcinoma of the stomach.

DUODENAL CONTENTS:

Examination of the duodenal contents by Lyon's method will frequently prove of service in the determination of biliary tract infection and occasionally in an isolated case, give assistance in suspected pancreatic disease.

STOOLS:

Perhaps no procedure of value is less frequently and more poorly done than examination of the stool. Aside from the general run of familiar parasites, such as hookworm, it has been recently shown by competent workers that from six to ten per cent of all persons in the temperate zones of the United States harbor pathogenic amoebae or their cysts, and that more than a few obscure abdominal cases can be cured by antiamebic therapy. Amoebic infection and dysentery are far from synonymous.

SPUTUM:

Aside from examinations for tubercle bacilli, microscopic and cultural, search for fungi and a search for Vincent's organism have many times cleared up the etiology of obscure pulmonary conditions. In fact, such studies, combined with radiography following lipiodol injections into the bronchial tree, mark a distinct advance in the study of pulmonary pathology.

TRINITY HOSPITAL STAFF

J. I. Scarborough, M. D.; M. D. Ogden, M. D.; A. M. Zell, M. D.; O. K. Judd, M. D.; R. B. Moore, M. D., and S. T. W. Cull, M. D.

*This is the eighth of a series of articles. The ninth will appear in an early number.

EPHEDRINE SULPHATE LILLY

and its Preparations

For the convenience of physicians in treating asthma, hay fever, and in eye, nose and throat practice, we are offering the following Ephedrine Sulphate preparations:

No. 53 Ampoule Ephedrine Sulphate, 0.05 Gm., in boxes of six.

Ephedrine Sulphate in powder form, in 1-4 ounce vials.

No. 10 Solution Ephedrine Sulphate, 3%, in ounce bottles.

No. 20 Inhalant Ephedrine Compound in oil, in ounce bottles.

No. 114 Pulvules (filled capsules) Ephedrine Sulphate, 0.025 Gm., for oral use, in packages of 40 and 500.

No. 115 Pulvules (filled capsules) Ephedrine Sulphate, 0.05 Gm., in packages of 40 and 500.

Ephedrine Sulphate, Lilly, and its preparations are supplied through the drug trade.

Send for further information

ELI LILLY AND COMPANY
INDIANAPOLIS, U. S. A.

THE HOUSE THAT FIRST MADE
INSULIN
COMMERCIALY AVAILABLE IN THE UNITED STATES

THE BULLETIN

OF

Trinity Hospital

PUBLISHED UNDER THE DIRECTION OF THE STAFF

Vol. II

LITTLE ROCK, ARK., AUGUST, 1927

No. 3

Clinical vs. Laboratory Medicine*

During the past decade, medical literature has fairly bristled with polemics upon the vices and virtues of "laboratory" medicine, consisting, as a rule, of prejudicial ventilations on both sides rather than any judicial attempt at a proper evaluation of the facts. Such a state of affairs has arisen largely through the attempt to draw sharp distinctions where, fundamentally, no sharp differences exist. The stethoscope and sphygmomanometer are scarcely less to be considered "instruments of precision" than the microscope or the colorimeter. The ophthalmoscope and the distillation tube for blood urea may give the same answer—nephritis for example. The use of any instrument or "method" requires training and judgment as do the fingers that palpate and percuss and the intellect that takes the history. They are all absolute or relative, final or tentative, significant or meaningless, in the same sense and in the same degree. The effects of ignorance, carelessness and dishonesty apply equally to all. The stethoscope no doubt has led as many men to diagnostic disaster as the sputum examination or the Wassermann test, and for the same reason, the reason being that medicine is not an exact science. The failure to use or the improper use of a history form very frequently leads to the same sort of results as the physical examination which consists in gazing wisely at a tongue or the search for sugar or casts in a specimen of urine, aged forty-eight hours. In many, perhaps the majority of instances, to insist that the "physical examination" is of more importance than the x-ray plate or the "blood examination," is of the same order as an insistence that palpation is more useful than percussion or that one link in a chain is of more moment than the others. The clinician may prove to the radiologist that the lesion at the apex of a lung is not responsible for the patient's symptoms, or, to the


laboratory man that his high white count is not due to an infection. On the other hand, the laboratory man may show the clinician that his patient's jaundice is not due to obstruction—by means of a Van den Bergh test, or that that case of P. I. D. is not yet "cold" in spite of a normal white count and temperature—by running a sedimentation rate. The point we wish to stress is that an adequate study of any case must involve three *equally* important factors—a history, a physical examination and at least a certain minimum of laboratory work, including x-ray. In any given case one or the other of these factors may furnish the more decisive information, the others being of minor import, yet in the end all three are so mutually interdependent that no distinction as to "importance" can be drawn.

No one man can master all of medicine—hence the specialties, and, that which we know well and do well is, for ourselves at least, apt to appear all-important, hence the antagonisms of clinician and laboratory worker. It has been said, and truly, that "internal" medicine and "laboratory" medicine have fallen into a certain degree of disrepute, during the past ten years, through "laboratory failures." This being granted, an inquiry into the whys and wherefores might prove, perhaps, somewhat enlightening, though not perchance presenting a particularly flattering picture. Many clinicians insist, and the older the man, as a rule, the more he insists, that laboratory results tend to be unreliable, or if reliable merely furnish information which can be arrived at more easily and inexpensively in other ways. The laboratory man on the other hand is very prone to regard his tests, even the newer and untried ones, as absolute, politely informing the clinician that he not only does not know enough to properly utilize the facilities which he, the laboratory man, has placed at his disposal, but that he does not even know his own business.

TRINITY HOSPITAL STAFF

J. I. Scarborough, M. D.; M. D. Ogden, M. D.; A. M. Zell, M. D.; O. K. Judd, M. D.; R. B. Moore, M. D., and S. T. W. Cull, M. D.

*This is the ninth of a series of articles. The tenth will appear in an early number.



EPHEDRINE SULPHATE LILLY

and its Preparations

For the convenience of physicians in treating asthma, hay fever, and in eye, nose and throat practice, we are offering the following Ephedrine Sulphate preparations:

No. 53 Ampoule Ephedrine Sulphate, 0.05 Gm., in boxes of six.

Ephedrine Sulphate in powder form, in 1-4 ounce vials.

No. 10 Solution Ephedrine Sulphate, 3%, in ounce bottles.

No. 20 Inhalant Ephedrine Compound in oil, in ounce bottles.

No. 114 Pulvules (filled capsules) Ephedrine Sulphate, 0.025 Gm., for oral use, in packages of 40 and 500.

No. 115 Pulvules (filled capsules) Ephedrine Sulphate, 0.05 Gm., in packages of 40 and 500.

Ephedrine Sulphate, Lilly, and its preparations are supplied through the drug trade.

Send for further information

ELI LILLY AND COMPANY
INDIANAPOLIS, U. S. A.

THE HOUSE THAT FIRST MADE
INSULIN
COMMERCIALY AVAILABLE IN THE UNITED STATES

THE BULLETIN

OF

Trinity Hospital

PUBLISHED UNDER THE DIRECTION OF THE STAFF

VOL. II

LITTLE ROCK, ARK., SEPTEMBER, 1927

No. 4

Planning A Hospital*

To the average physician, trained in hospitals and working in them the greater part of his life, never comes the realization of the infinite amount of detail which enters into the planning and construction of such an institution. The following is a brief outline of some of the problems met and solved in the planning, construction and equipment of Trinity Hospital.

Bearing in mind the safety of the helpless patient as the primary requirement, the building was rendered as free from fire hazard as modern construction could make it. This specification was carried to extreme lengths, and as a result, even the ceilings are constructed of reinforced concrete beams with four-inch slabs of reinforced concrete between. The partitions were built of solid plaster and metal and no wood entered into the building except about the doors and windows. The doors are rather unique even in modern hospitals, each provided with a check to close it silently and positively, without knobs or latches to rattle or click, hooks being provided instead, which allow the door to be opened by the wrist even when both hands are full.

The color scheme adopted is a soft gray, both for the walls and for the furniture, which is a distinct relief from the glaring white so often found in hospitals and which provides a much more restful, homelike atmosphere.

The call system is also a noiseless one, so arranged that when the patient turns on the call light it is not possible for him to turn it off until the nurse arrives. The signal lights are placed wherever the nurse may have oc-

casional to be, whether cross corridor, chart room or diet kitchen, so that it is not possible for a light to be overlooked. Adding further to the comfort of the more delicate patients, exhaust fans installed in the kitchens and in the operating rooms carry to the outside all objectionable odors which might otherwise find their way into the building.

All of the rooms are so designed that each is an outside room with all doors in the corridor so placed that no door is opposite to that of the room across the hall. It is therefore not possible to look from one room into another. One feature, so often overlooked in hospitals, which catches the eye of the visitor, is that there are no ceiling lights to glare in the eyes of the recumbent patient.

Departing from the customary procedure in some institutions of turning off the heat at night, the heating system is so arranged that an even temperature is maintained throughout the twenty-four hours.

Building such an institution in a crowded city carries with it certain problems of grounds, lawns, etc., and even when space for these is available the patients are exposed to the curiosity of the passers by. This was solved by building Trinity Hospital in the form of a hollow square with a spacious roof garden, both insuring absolute privacy. The interior of the square is a grass lawn with fountain, goldfish and flowers.

The above are just a few of the numerous details worked out, but will suffice perhaps, to give some idea of what the planning of a hospital means.

TRINITY HOSPITAL STAFF

J. I. Scarborough, M. D.; M. D. Ogden, M. D.; A. M. Zell, M. D.; O. K. Judd, M. D.; R. B. Moore, M. D., and S. T. W. Cull, M. D.

*This is the tenth of a series of articles. The eleventh will appear in an early number.

For Safe-Guarding The School Children



DIPHTHERIA ANTITOXIN, LILLY

*A Concentrated Globulin, Small Volume, Carefully
Tested, Accurately Standardized*

THE SCHICK TEST, LILLY TOXIN-ANTITOXIN MIXTURE, LILLY *For Immunizing Against Diphtheria*

SMALLPOX VACCINE, LILLY

*Gives a Maximum Percentage of "Takes" in Primary
Vaccinations When Proper Storage Conditions
Have Been Observed*

SCARLET FEVER

STREPTOCOCCUS ANTITOXIN, LILLY
*A Concentrated Globulin, Carefully Tested,
Standardized*

RICINOLEATED ANTIGEN

SCARLET FEVER, IMMUNIZING, LILLY
*For Active Immunization Against Scarlet Fever
A One to Two Dose Treatment for Young Children*



*All Lilly Products are Distributed through the
Drug Trade*

Physicians' Inquiries Invited

ELI LILLY AND COMPANY

INDIANAPOLIS, U. S. A.

THE BULLETIN

OF

Trinity Hospital

PUBLISHED UNDER THE DIRECTION OF THE STAFF

Vol II

LITTLE ROCK, ARK., OCTOBER, 1927

No. 5

Hospital Service*

Theoretically there should be no difference between a hospital which takes care of pay and charity patients and one which caters to pay patients alone, but modern economic conditions have made a certain difference inevitable.

Trinity Hospital was designed and is operated for the care of pay patients alone and is thus able to furnish a service which would not be possible except in a most liberally endowed charity institution. For instance, no training school for nurses is operated. There is no question that there must be training schools for nurses and it is entirely proper that charity patients should be used for training the members of this most useful profession, but most patients who can pay their way prefer the finished graduate to the pupil nurse under instruction.

For this reason, Trinity Hospital employs only graduate nurses, and in sufficient numbers, so that these nurses work only eight hours a day. This plan has proven so satisfactory that a special nurse is employed only on the rarest occasions and then only by patients who, from past experiences in other institutions, are doubtful of the efficiency of this plan.

The same reasoning holds true concerning internes and for this reason Trinity Hospital has no internes, all of the work usually done by internes being done personally by the members of the staff. Each medical man can recall during his interne days instances of the difficulty of inducing patients to submit to examination or observation by medical students. Trinity Hospital has no affiliation with any medical school and its patients are not used for teaching purposes. Facilities, however, are provided for visiting physicians who are

welcomed in its operating rooms and other departments at all times.

In providing a service of this character, no colored patients can of course be admitted. Certain infectious diseases and mental cases are likewise excluded.

Trinity Hospital is non-sectarian, all creeds being admitted.

In many hospitals the relatives of patients constitute a troublesome problem. Some institutions exclude them except during very limited visiting hours. Realizing that it is neither practicable nor humane to exclude the mother of a small child following operation, arrangements are made whereby an additional bed is placed in the room with the child and the mother has the opportunity of staying with the little one as long as she wishes.

The serving of food to a sick person demands the highest skill, not only in its preparation, but in the attractive presentation. A competent dietitian is able to give her full time to the serving of these trays as she is not required to even supervise the buying or preparation of the food, which is done by another department. The results of such a plan have been very gratifying.

Many small items, such as a bedside lamp which turns down, individual telephones in some rooms, and especially the complete individual equipment of each room whereby each patient is certain that his equipment is being used by no one else adds to the comfort of the patient. This applies even to thermometers. Each room is equipped with an electric fan and with an electric pad which has replaced entirely the use of hot water bags. It might be possible to go further into the details of the hospital service, but the above will give a general idea of some of the unusual features of Trinity Hospital service.

TRINITY HOSPITAL STAFF

J. I. Scarborough, M. D.; M. D. Ogden, M. D.; A. M. Zell, M. D.; O. K. Judd, M. D.; R. B. Moore, M. D., and S. T. W. Cull, M. D.

*This is the eleventh of a series of articles. The twelfth will appear in an early number.

There is a Lilly Ephedrine Sulphate Preparation to meet your Requirements

Much of the investigative studies on ephedrine, the active principle of the ancient Chinese drug—Ma Huang, was accomplished with Ephedrine Sulphate.

PROPERTIES

Chemically and physiologically Ephedrine resembles epinephrine. Ephedrine is easy of isolation; solutions are stable—even on boiling—and miscible with silver protein solutions. Ephedrine can be administered orally or hypodermically; the action of the drug is prolonged; absorption from the gastro-intestinal tract is effective; toxicity is low and there are no habit-forming tendencies.

THERAPY

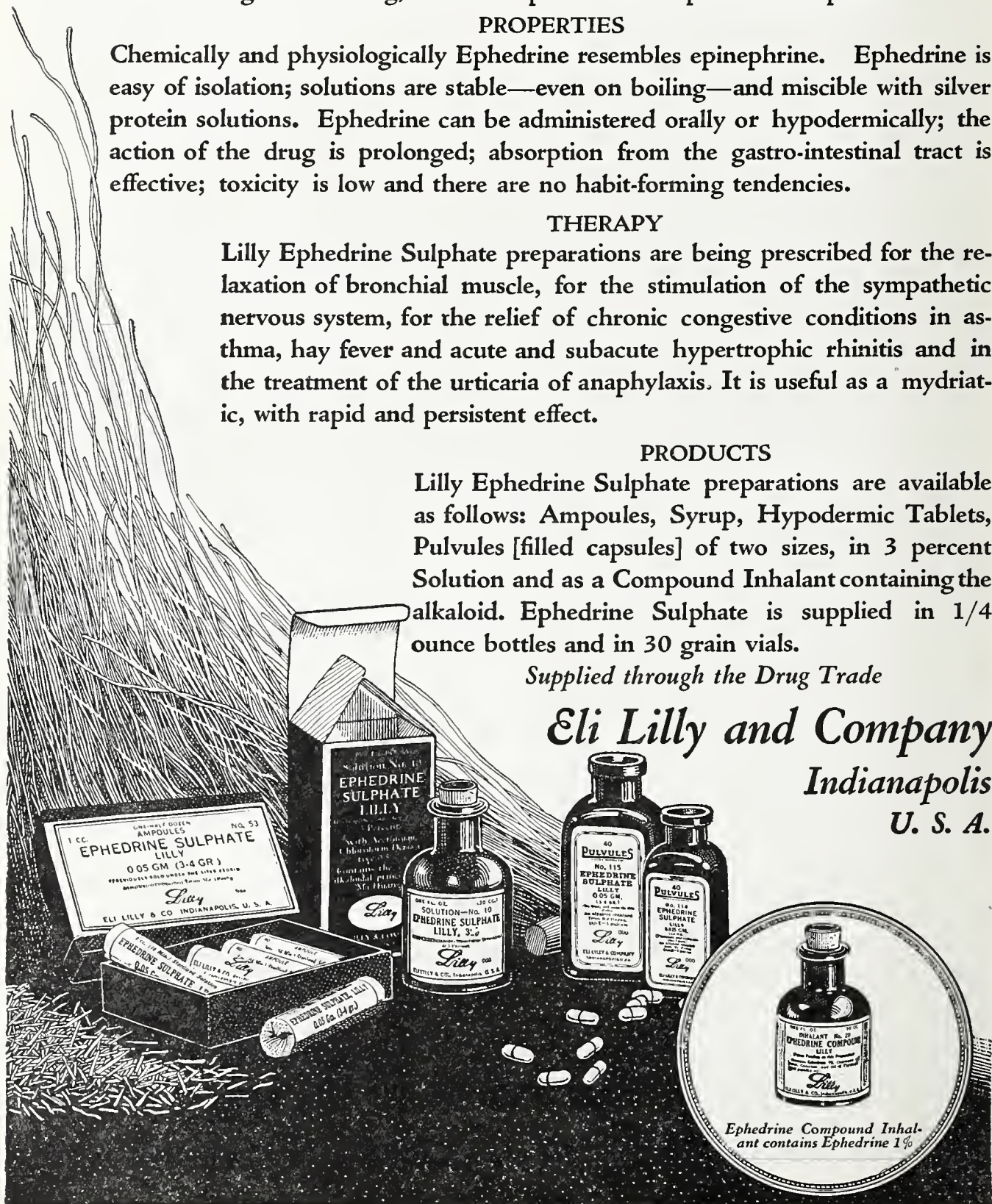
Lilly Ephedrine Sulphate preparations are being prescribed for the relaxation of bronchial muscle, for the stimulation of the sympathetic nervous system, for the relief of chronic congestive conditions in asthma, hay fever and acute and subacute hypertrophic rhinitis and in the treatment of the urticaria of anaphylaxis. It is useful as a mydriatic, with rapid and persistent effect.

PRODUCTS

Lilly Ephedrine Sulphate preparations are available as follows: Ampoules, Syrup, Hypodermic Tablets, Pulvules [filled capsules] of two sizes, in 3 percent Solution and as a Compound Inhalant containing the alkaloid. Ephedrine Sulphate is supplied in 1/4 ounce bottles and in 30 grain vials.

Supplied through the Drug Trade

Eli Lilly and Company
Indianapolis
U. S. A.



THE BULLETIN

OF

Trinity Hospital

PUBLISHED UNDER THE DIRECTION OF THE STAFF

Vol. II

LITTLE ROCK, ARK., NOVEMBER, 1927

No. 6

Hospital Charges*

There has been much discussion during the past few years among hospital administrators regarding the most desirable method of making charges for hospital services, and various plans have been advocated. Some institutions have a minimum charge for private rooms of a few dollars a day for which they furnish food, a stated amount of linens and the intermittent services of pupil nurses, making extra charges for special diets, medicines, surgical dressings, electric fans, etc. Under such a plan, it is necessary for the patient to employ a special nurse (two for the average surgical operation) at \$6.00 a day and her board at \$1.50 per day.

It has therefore been found much more satisfactory in Trinity Hospital, and much more economical for the patient, to include all of these various items into one room charge which varies from \$7.00 to \$15.00 a day, according to the location of the room, the service being the same in all. For this daily room charge the patient is furnished with adequate nursing by graduate nurses day and night, medicines, dressings, electric fan, morning and afternoon daily papers, telephone and special diets. It is not necessary usually to employ a special nurse.

As it would be inequitable to charge a medical patient for the use of the operating room,

surgical and obstetrical patients are charged \$15.00 and \$10.00 respectively, which covers the use of the operating room or delivery room and of subsequent dressings, irrespective of the amount of material used. By employing a full time anaesthetist and various other economies, it is possible to charge only \$15.00 for an ethylene anaesthetic, which is very moderate in view of the high cost of ethylene. Ethylene is the routine anaesthetic except in special cases. A fee of \$5.00 is charged to cover the routine laboratory work and in the usual case is the total laboratory charge, irrespective of how many examinations are made. A special charge is occasionally made for those laboratory examinations which require an unusual amount of work.

Repeated comparisons of making hospital charges in the above manner with the various other methods in general use in this country seem to establish the desirability of the Trinity Hospital method. Not only from the hospital standpoint, with its lessened bookkeeping and elimination of dissatisfaction of patients over small items, has this been proven, but the method also enables the patient to obtain satisfactory hospital attention at a price which is considerably less than that encountered under other plans. This is evidenced by its growing popularity.

TRINITY HOSPITAL STAFF

J. I. Scarborough, M. D.; M. D. Ogden, M. D.; A. M. Zell, M. D.; O. K. Judd, M. D.; R. B. Moore, M. D., and S. T. W. Cull, M. D.

*This is the twelfth of a series of articles. The thirteenth will appear in an early number.

There is a Lilly Ephedrine Sulphate Preparation to meet your Requirements

Much of the investigative studies on ephedrine, the active principle of the ancient Chinese drug—Ma Huang, was accomplished with Ephedrine Sulphate.

PROPERTIES

Chemically and physiologically Ephedrine resembles epinephrine. Ephedrine is easy of isolation; solutions are stable—even on boiling—and miscible with silver protein solutions. Ephedrine can be administered orally or hypodermically; the action of the drug is prolonged; absorption from the gastro-intestinal tract is effective; toxicity is low and there are no habit-forming tendencies.

THERAPY

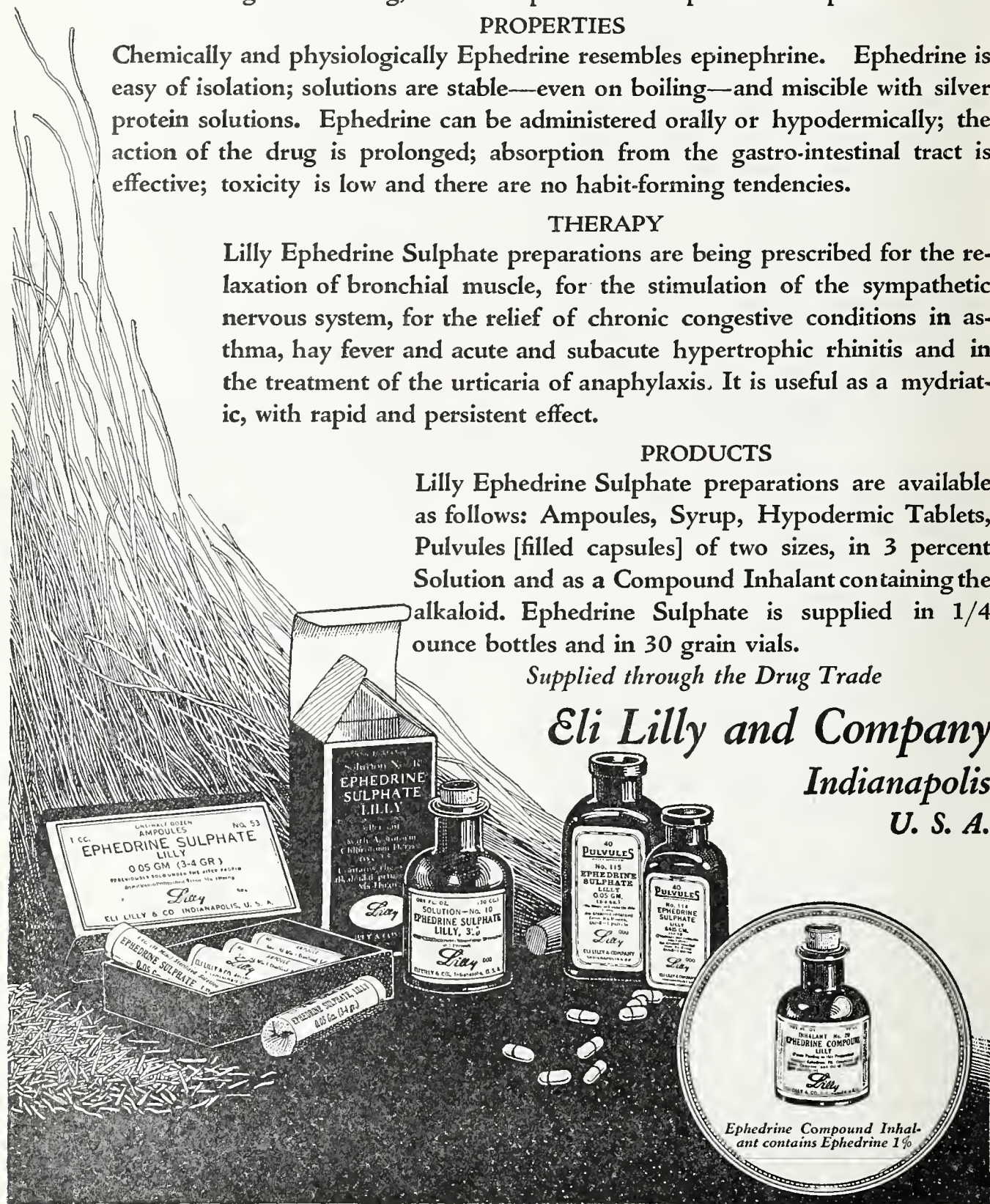
Lilly Ephedrine Sulphate preparations are being prescribed for the relaxation of bronchial muscle, for the stimulation of the sympathetic nervous system, for the relief of chronic congestive conditions in asthma, hay fever and acute and subacute hypertrophic rhinitis and in the treatment of the urticaria of anaphylaxis. It is useful as a mydriatic, with rapid and persistent effect.

PRODUCTS

Lilly Ephedrine Sulphate preparations are available as follows: Ampoules, Syrup, Hypodermic Tablets, Pulvules [filled capsules] of two sizes, in 3 percent Solution and as a Compound Inhalant containing the alkaloid. Ephedrine Sulphate is supplied in 1/4 ounce bottles and in 30 grain vials.

Supplied through the Drug Trade

Eli Lilly and Company
Indianapolis
U. S. A.



THE BULLETIN

OF

Trinity Hospital

PUBLISHED UNDER THE DIRECTION OF THE STAFF

Vol. III

LITTLE ROCK, ARK., DECEMBER, 1927

No. 1

The Trinity Hospital Group*

Much has been written first and last about the group method of practicing medicine and all over this country groups have been born and have died with equal regularity. It is interesting therefore to analyze the known causes of this mortality.

Perhaps the most frequent cause of rupture is the dissatisfaction of the junior members of a group formed about one single individual as a nucleus, this dissatisfaction arising from either financial or professional sources. Another frequent cause is the inability to agree upon an equitable distribution of the income, as many members feel that their income would be much larger if practicing alone. An experience with this type of practice dating back to 1914 has proven several absolute requisites for the permanence of a group.

There should be no one dominating individual in a group and though the financial compensation of the different members will vary they should all have an equal voice in the determination of the policies and activities and no matter of major importance should be decided without the decision being unanimous. A majority rule is generally disastrous.

Another absolute essential is that the income of no member of the group should be affected by the amount of work done or the number of patients seen. This last insures the patient's receiving everything that the group has to offer and entirely removes the ease from any possible effects of self-interest. For instance, it often requires nicety of judgment to determine whether a certain case of uterine carcinoma requires surgery, deep x-ray therapy, radium or all three, and it is appar-

ent that, in an institution where all of these agents are equally available, the patient is more liable to receive what best suits her ease if each member has the same financial interest in the case, irrespective of the method chosen.

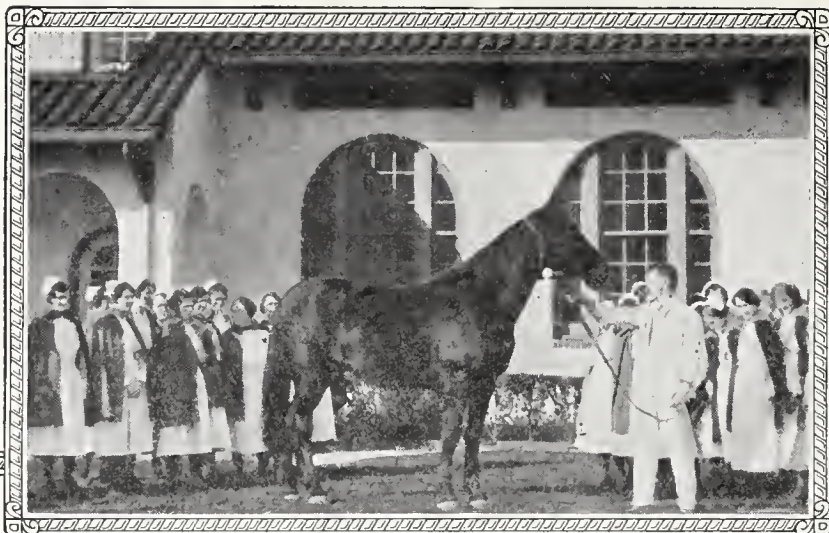
Another cause of non-success in group medicine has been the lack of that personal responsibility which is so appreciated by the patient and which he looks to the family physician to supply. There is no reason why this personal touch should be lacking in any group. When the patient presents himself for diagnosis or treatment he should be in charge of some one member and this member should direct the various consultations and laboratory examinations, and, when all of the data concerning this case is in, correlate the findings and advise the patient with just the same sense of personal responsibility to which this patient has always been accustomed in his family physician.

Most physicians love their profession and their work in spite of its daily hardships and drudgery and it is odd therefore that in all of the discussions pro and con on group practice, no mention has ever been made of the pleasure in such work. By pooling facilities most of the drudgery can be eliminated. No books to keep, no bills to make out, no instruments to clean, all of these and more, together with the daily frank association with men equally interested in the work—some one to carry the burden during vacations and other absences, the weekly conferences, all of these make it almost unthinkable that one familiar with these advantages alone should even consider for a moment a return to individual practice.

TRINITY HOSPITAL STAFF

J. I. Scarborough, M. D.; M. D. Ogden, M. D.; A. M. Zell, M. D.; O. K. Judd, M. D.; R. B. Moore, M. D., and S. T. W. Cull, M. D.

*This is the thirteenth of a series of articles. The fourteenth will appear in an early number.



Within four years this horse has produced sufficient scarlet fever antitoxin to save the lives of many thousand children.

When Scarlet Fever Threatens

Ricinoleated Antigen, Scarlet Fever, Immunizing, Lilly, offers a practical and safe method of suppressing scarlet fever epidemics by active immunization of unexposed susceptibles. Immunity is established promptly in the majority of young subjects with a minimal number of doses. Reactions are negligible when the antigen is given intramuscularly.

Scarlet Fever Streptococcus Antitoxin, Lilly, is a potent serum, refined by improved methods of concentration. The dramatic results obtained with the antitoxin in the treatment of severe cases of scarlet fever make it a valuable specific agent.

ELI LILLY AND COMPANY *Indianapolis, U. S. A.*

The following Lilly Scarlet Fever Products are available through the drug trade: Ricinoleated Antigen, Scarlet Fever, Immunizing, Lilly, R-302, 1 cc. vials, R-304, 5 cc. vials, R-307, 20 cc. vials.

Special packages are available for the immunization of larger groups.

Scarlet Fever Streptococcus Antitoxin, A-80, Prophylactic Dose; A-82, Therapeutic Dose.



THE BULLETIN

OF

Trinity Hospital

PUBLISHED UNDER THE DIRECTION OF THE STAFF

Vol. III

LITTLE ROCK, ARK., JANUARY, 1928

No. 2

Caesarean Section in Eclampsia of Pregnancy*

There are various methods advocated in the treatment of eclampsia of pregnancy, but there is one, it seems to us, that is outstanding in its happy results in a certain type of case, with reference to the welfare of both mother and child, viz., of some primiparae of which the following is an example:

O. H.: Age twenty-three; housewife; married three years; gravida first. Family history unimportant; no illness of any consequence and no operations. Weight ninety-seven pounds. The second month of pregnancy physical examination was negative in its entirety. Measurements: interspinous 26 cm., intercrural 28 cm., external conjugate 17 cm.

Last menstrual period began February 18th, 1927. Estimated confinement date, November 25th, 1927. Pregnancy ran an uneventful course with blood pressure ranging from 110 to 120 systolic, with the diastolic 70 to 90 mm.

On September 30th, 1927, urinalysis and blood pressure readings were normal. On October 8th (thirty-fourth week of gestation) she complained of headache. On the morning of October 9th both headache and generalized edema were present. She arrived at the hospital at noon of October 10th, when her urine showed albumen, an occasional hyaline cast, with thirteen pus cells per low power field. Her N. P. N. was 34.6 mg. There was a suggestion of edema of the retinae and her blood pressure was 190-120.

She was put to bed and a colonic flush of 3 per cent sodium bicarbonate and a saline laxative given.

At 7 P. M. the patient had a convulsion and another at 8:30 P. M.

At 9:30 P. M. a low Caesarean was performed. The presentation was L. O. P. and the baby weighed four pounds and responded in about ten minutes to artificial respiration and oxygen. The mother had one convulsion immediately following the operation and another at 4:15 A. M., November 11th.

The urine cleared up in three days and the blood pressure dropped to 160-90 on October 23rd and was 120-70 on November 7th.

Her recovery was uneventful and she is able to nurse the baby, which, now, two months later, is gaining rapidly.

COMMENTS

The decision to operate was based on the following points:

1. Viable infant.
2. Delay by any other method of delivery being considered hazardous to both mother and child, viz., rapid dilatation and forceps or podalic version meant certain death of the six weeks premature infant. The position was occipitosacral. The mother would necessarily have sustained injuries inviting shock, hemorrhage and infection.

Delay by use of dilating bags would, no doubt, have been attended by several more convulsions and their accompanying hazards.

As a result of the Caesarean operation, we have a living child and a mother with no permanent kidney damage and no results of forceps trauma.

This should be a strong argument for the hospitalization of maternity cases where experienced surgeons are at command.

*This is the fourteenth of a series of articles. The fifteenth will appear in an early number.

TRINITY HOSPITAL STAFF
J. I. Scarborough, M. D.; M. D. Ogden, M. D.; A. M. Zell, M. D.; O. K. Judd, M. D.; R. B. Moore, M. D., and S. T. W. Cull, M. D.



Within four years this horse has produced sufficient scarlet fever antitoxin to save the lives of many thousand children.

When Scarlet Fever Threatens

Ricinoleated Antigen, Scarlet Fever, Immunizing, Lilly, offers a practical and safe method of suppressing scarlet fever epidemics by active immunization of unexposed susceptibles. Immunity is established promptly in the majority of young subjects with a minimal number of doses. Reactions are negligible when the antigen is given intramuscularly.

Scarlet Fever Streptococcus Antitoxin, Lilly, is a potent serum, refined by improved methods of concentration. The dramatic results obtained with the antitoxin in the treatment of severe cases of scarlet fever make it a valuable specific agent.

ELI LILLY AND COMPANY

Indianapolis, U. S. A.

The following Lilly Scarlet Fever Products are available through the drug trade: Ricinoleated Antigen, Scarlet Fever, Immunizing, Lilly, R-302, 1 cc. vials, R-304, 5 cc. vials, R-307, 20 cc. vials.

Special packages are available for the immunization of larger groups.

Scarlet Fever Streptococcus Antitoxin, A-80, Prophylactic Dose; A-82, Therapeutic Dose.



THE BULLETIN

OF

Trinity Hospital

PUBLISHED UNDER THE DIRECTION OF THE STAFF

Vol. III

LITTLE ROCK, ARK., FEBRUARY, 1928

No. 3

Hospital Service

Theoretically there should be no difference between a hospital which takes care of pay and charity patients and one which caters to pay patients alone, but modern economic conditions have made a certain difference inevitable.

Trinity Hospital was designed and is operated for the care of pay patients alone and is thus able to furnish a service which would not be possible except in a most liberally endowed charity institution. For instance, no training school for nurses is operated. There is no question that there must be training schools for nurses and it is entirely proper that charity patients should be used for training the members of this most useful profession, but most patients who can pay their way prefer the finished graduate to the pupil nurse under instruction.

For this reason, Trinity Hospital employs only graduate nurses, and in sufficient numbers, so that these nurses work only eight hours a day. This plan has proven so satisfactory that a special nurse is employed only on the rarest occasions and then only by patients who, from past experiences in other institutions, are doubtful of the efficiency of this plan.

The same reasoning holds true concerning internes and for this reason Trinity Hospital has no internes, all of the work usually done by internes being done personally by the members of the staff. Each medical man can recall during his interne days instances of the difficulty of inducing patients to submit to examination or observation by medical students. Trinity Hospital has no affiliation with any medical school and its patients are not used for teaching purposes. Facilities, however, are provided for visiting physicians who are welcomed in its operating rooms and other departments at all times.

In providing a service of this character, no colored patients can of course be admitted. Certain infectious diseases and mental cases are likewise excluded.

Trinity Hospital is non-sectarian, all creeds being admitted.

In many hospitals the relatives of patients constitute a troublesome problem. Some institutions exclude them except during very limited visiting hours. Realizing that it is neither practicable nor humane to exclude the mother of a small child following operation, arrangements are made whereby an additional bed is placed in the room with the child and the mother has the opportunity of staying with the little one as long as she wishes.

The serving of food to a sick person demands the highest skill, not only in its preparation, but in the attractive presentation. A competent dietitian is able to give her full time to the serving of these trays as she is not required to even supervise the buying or preparation of the food, which is done by another department. The results of such a plan have been very gratifying.

Many small items, such as a bedside lamp which turns down, individual telephones in some rooms, and especially the complete individual equipment of each room whereby each patient is certain that his equipment is being used by no one else adds to the comfort of the patient. This applies even to thermometers. Each room is equipped with an electric fan and with an electric pad which has replaced entirely the use of hot water bags. It might be possible to go further into the details of the hospital service, but the above will give a general idea of some of the unusual features of Trinity Hospital service.

TRINITY HOSPITAL STAFF

J. I. Scarborough, M. D.; M. D. Ogden, M. D.; A. M. Zell, M. D.; O. K. Judd, M. D.; R. B. Moore, M. D., and S. T. W. Cull, M. D.

LIVER EXTRACT No. 343

PREPARED BY THE LILLY RESEARCH LABORATORIES
UNDER DIRECTION OF THE COMMITTEE ON PERNICIOUS ANEMIA
OF THE HARVARD MEDICAL SCHOOL

For Use in Treatment of Pernicious Anemia

Nature of the Liver Extract—Liver Extract No. 343 represents one of the fractions isolated by the Harvard investigators. It contains in high concentration the active principle which is effective in the treatment of pernicious anemia and is at present the most practical liver fraction for therapeutic purposes.

Liver Extract No. 343 is available as a powder. To insure stability, it is supplied in hermetically sealed vials. It is soluble in water and of high potency. The amount contained in each vial represents 100 grams (approximately 3 1-2 ounces) of fresh, raw liver.

Administered Orally—The Liver Extract is readily dissolved in water, orange juice or other equally acceptable and palatable vehicle, and administered orally.

Results Obtained in Pernicious Anemia—Following the administration of at least four vials of Liver Extract daily, distinct clinical improvement is to be expected within tendays. *Frequently a gain of two million red blood corpuscles per cubic millimeter occurs within three weeks, and a restoration of the blood picture to normal within two or three months.*

There are no known contraindications to the use of Liver Extract in pernicious anemia.

How Supplied—Liver Extract No. 343 is supplied through the drug trade in boxes containing two dozen vials.

MADE ONLY BY

ELI LILLY AND COMPANY
INDIANAPOLIS, U. S. A.

THE BULLETIN

OF

Trinity Hospital

PUBLISHED UNDER THE DIRECTION OF THE STAFF

Vol. III

LITTLE ROCK, ARK., MARCH, 1928

No. 4

“DOCTOR, WHAT WILL THIS OPERATION COST?”

The mounting costs and complexity of present-day methods in diagnosis and treatment have given rise to the saying, now almost trite, that only the very rich man or very poor man can afford an illness; the very rich man because he can pay for all necessities and the very poor man because they are given to him through endowed charities. To a certain extent this is true and the above mentioned costs become a matter of serious import to the man of relatively small income who has the misfortune to have a serious illness in his family, a major operation often resulting in a financial disaster from which it may take years to recover, even under favorable circumstances. In many instances the savings of years are entirely wiped out and in other instances even the home or small farm is mortgaged. As a result of this economic condition, many self-respecting individuals, rather than apply for charity at the endowed hospitals, allow treatment to be postponed, often with disastrous results.

It is of the utmost importance, not only to the individual, but to the community, that this type of patient receive the highest grade of medical and hospital attention, as he, least of all, can afford the prolonged illness resulting from faulty service, such as wound infections, etc., for not only are his expenses thereby increased, but his return to a gainful occupation is delayed with a consequent loss of income.

Aside from all other considerations and from an economic standpoint alone, the best service is none too good.

For instance, let us consider the cost of an ordinary case of acute unruptured appendicitis. Below is a table summarizing the usual costs in such an instance, though it must be realized that each item is necessarily subject to some variation:

Hospital, 12 days at \$5 a day.....	\$60.00
Day Nurse, 5 days at \$6 a day.....	30.00
Night Nurse, 5 nights at \$6 a night.....	30.00
Board of Day Nurse, 5 days at \$1.50.....	7.50
Board of Night Nurse, 5 nights at \$1.50...	7.50
Operating Room Fee.....	15.00
Anesthetic Fee.....	15.00
Dressings and Medicines.....	5.00
Laboratory Fee.....	5.00
Surgeon's Fee.....	200.00
	<hr/>
	\$375.00

It will be observed that the above estimate does not include any examination charge by the surgeon and that all of the items are estimated at perhaps below the average.

This too does not take into consideration the possible occurrence of post-operative complications, which occasionally necessitate a longer stay in the hospital with a consequent increase in the amount of several of the above items. The surgeon's fee is also placed at a figure which is often below that charged by many surgeons.

After a careful consideration of these economic conditions, Trinity Hospital has decided

to attempt at least a partial solution of this problem by offering to the patient of small means a service for which he can afford to pay and still preserve his self-respect.

Due to the use of an accurate system of cost accounting for the past several years, the cost of each small item in the care of a patient is known, and by disregarding the already existing overhead, eliminating credit losses and by charging this class of patients only with the additional cost which their care entails, it is possible to make a small single cash charge to cover all examination, laboratory, hospital and professional fees, without departing from its usual standard of medical, surgical or hospital attention. No credit can be extended to this class of patients and they will have no choice of rooms. However, Trinity Hospital has no wards, but has only single and double rooms.

Below are a few examples of charges under this plan. Other fees are proportionate.

Examination, laboratory, hospital, operating room, anaesthetic and surgical fee for:	
Appendectomy—no drainage.....	\$196.00
Cholecystectomy	234.00
Herniorrhaphy	193.00

Hysterectomy	247.00
Normal Labor	159.00
Radium (Cancer of cervix).....	166.00
Hemorrhoidectomy	107.00

At first glance, it might seem impossible to furnish the above services, with day and night graduate nurses, no charges for medicines or dressings, etc., many small luxuries such as morning and afternoon daily papers for the prices stated and the natural conclusion would be that there is some curtailment of the usual hospital routine. But this is not the case—the only difference between these and other patients being that these patients pay a single cash fee in advance and occupy a double room.

The above described plan does not affect in of this hospital, but is an additional feature any way or alter the former or present policy designed only for the benefit of those who would otherwise be deprived of it. This plan is, in a measure, experimental and should it prove unsatisfactory or unprofitable after an adequate trial it will be discontinued.

TRINITY HOSPITAL STAFF
 J. I. Scarborough, M. D.; M. D. Ogden, M. D.; A. M. Zell, M. D.; O. K. Judd, M. D.; R. B. Moore, M. D., and S. T. W. Cull, M. D.



THE BULLETIN

OF

Trinity Hospital

PUBLISHED UNDER THE DIRECTION OF THE STAFF

Vol. III

LITTLE ROCK, ARK., APRIL, 1928

No. 5

“DOCTOR, WHAT WILL THIS OPERATION COST?”

The mounting costs and complexity of present-day methods in diagnosis and treatment have given rise to the saying, now almost trite, that only the very rich man or very poor man can afford an illness; the very rich man because he can pay for all necessities and the very poor man because they are given to him through endowed charities. To a certain extent this is true and the above mentioned costs become a matter of serious import to the man of relatively small income who has the misfortune to have a serious illness in his family, a major operation often resulting in a financial disaster from which it may take years to recover, even under favorable circumstances. In many instances the savings of years are entirely wiped out and in other instances even the home or small farm is mortgaged. As a result of this economic condition, many self-respecting individuals, rather than apply for charity at the endowed hospitals, allow treatment to be postponed, often with disastrous results.

It is of the utmost importance, not only to the individual, but to the community, that this type of patient receive the highest grade of medical and hospital attention, as he, least of all, can afford the prolonged illness resulting from faulty service, such as wound infections, etc., for not only are his expenses thereby increased, but his return to a gainful occupation is delayed with a consequent loss of income.

Aside from all other considerations and from an economic standpoint alone, the best service is none too good.

For instance, let us consider the cost of an ordinary case of acute unruptured appendicitis. Below is a table summarizing the usual costs in such an instance, though it must be realized that each item is necessarily subject to some variation:

Hospital, 12 days at \$5 a day.....	\$60.00
Day Nurse, 5 days at \$6 a day.....	30.00
Night Nurse, 5 nights at \$6 a night.....	30.00
Board of Day Nurse, 5 days at \$1.50.....	7.50
Board of Night Nurse, 5 nights at \$1.50...	7.50
Operating Room Fee.....	15.00
Anesthetic Fee.....	15.00
Dressings and Medicines.....	5.00
Laboratory Fee.....	5.00
Surgeon's Fee.....	200.00
	<hr/>
	\$375.00

It will be observed that the above estimate does not include any examination charge by the surgeon and that all of the items are estimated at perhaps below the average.

This too does not take into consideration the possible occurrence of post-operative complications, which occasionally necessitate a longer stay in the hospital with a consequent increase in the amount of several of the above items. The surgeon's fee is also placed at a figure which is often below that charged by many surgeons.

After a careful consideration of these economic conditions, Trinity Hospital has decided

to attempt at least a partial solution of this problem by offering to the patient of small means a service for which he can afford to pay and still preserve his self-respect.

Due to the use of an accurate system of cost accounting for the past several years, the cost of each small item in the care of a patient is known, and by disregarding the already existing overhead, eliminating credit losses and by charging this class of patients only with the additional cost which their care entails, it is possible to make a small single cash charge to cover all examination, laboratory, hospital and professional fees, without departing from its usual standard of medical, surgical or hospital attention. No credit can be extended to this class of patients and they will have no choice of rooms. However, Trinity Hospital has no wards, but has only single and double rooms.

Below are a few examples of charges under this plan. Other fees are proportionate.

Examination, laboratory, hospital, operating room, anaesthetic and surgical fee for:

Appendectomy—no drainage.....	\$196.00
Cholecystectomy	234.00
Herniorrhaphy	193.00

Hysterectomy	247.00
Normal Labor	159.00
Radium (Cancer of cervix).....	166.00
Hemorrhoidectomy	107.00

At first glance, it might seem impossible to furnish the above services, with day and night graduate nurses, no charges for medicines or dressings, etc., many small luxuries such as morning and afternoon daily papers for the prices stated and the natural conclusion would be that there is some curtailment of the usual hospital routine. But this is not the case—the only difference between these and other patients being that these patients pay a single cash fee in advance and occupy a double room.

The above described plan does not affect in any way or alter the former or present policy of this hospital, but is an additional feature designed only for the benefit of those who would otherwise be deprived of it. This plan is, in a measure, experimental and should it prove unsatisfactory or unprofitable after an adequate trial it will be discontinued.

TRINITY HOSPITAL STAFF

J. I. Scarborough, M. D.; M. D. Ogden, M. D.; A. M. Zell, M. D.; O. K. Judd, M. D.; R. B. Moore, M. D., and S. T. W. Cull, M. D.



DATE DUE SLIP
UNIVERSITY OF CALIFORNIA MEDICAL SCHOOL LIBRARY
THIS BOOK IS DUE ON THE LAST DATE
STAMPED BELOW

Sep 20 48

7 DAY

DEC 21 1965

RETURNED

DEC 21 1965

v.23-24 1926- 1928	Arkansas medical society. Journal.	22044
--------------------------	--	-------

VA. F. Miley (Miss Caruso)	Sep20 48	SEP 13 1948
-------------------------------	----------	-------------

